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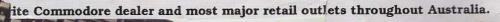
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Editorial

It's official, the Amiga 600 is real! Although this is by no means the dream Amiga we've been waiting for, there is no doubt it will provide the Amiga market with a solid shot in the arm. (See Notepad for details).

Dealers around the country are currently enjoying excellent sales, despite all the doom and gloom. It seems the latest price drops have

had a marked effect on demand. Amiga 2000 HDs are moving out the doors fast and demand for the Amiga 3000 is outstripping supply. Expect up to a four week wait.

There is no doubt Amigas are better value now than ever. At around \$4000 with monitor and options (less at some stores), the Amiga 3000 far out performs a 486DX, which by the time you add a sound card, operating system, enough memory to make it usable and throw in a few pieces of software, soon becomes a far more expensive proposition.

Although 386SX prices continue to fall, more people are discovering that this machine does not run Windows too well. Once again, by the time you add on the extras you need, and spend some money on software, the A2000AD with display Enhancer and VGA monitor starts to look competitive. Admittedly there is still a small shortfall in the number of colours you can display in high resolution modes, however this is being addressed. In all other areas the Amiga compares well. A 386SX with sound card and Windows, a decent word processor and some extra RAM will cost you close to \$2000. An Amiga 2000HD with Display Enhancer, VGA Monitor and a good wordprocessor, not to mention Workbench 2, comes in at around the same price - and even if it is a tad more, would certainly be a far more enjoyable machine to use.

Now with the arrival of the A600, the entry level market is also the domain of the Amiga. At under \$500, the A600 is a slick machine and great value for money. Throw in a hard drive and a faster processor and you'll be knocking the PC market for six!

The new machine will be on sale at the World of Commodore Show in July, which is fast turning into a huge event. Already there are nine US companies who have expressed serious interest in exhibiting. Bookings for the show have exceeded last year's final turn out, and we still have two months to go.

World of Commodore is a must for any Amiga owner wishing to check out the latest hardware, software, catch up on the new techniques, meet lots of other Amiga people and even bump into a few of the regular Australian Commodore and Amiga Review contributors. So, mark it into your calendar now - July 2-4 at Hall 5, Darling Harbour Exhibition Centre, Sydney - that's Thursday to Saturday. No doubt there will also be plenty of bargains to be had from people like Computer Spot and Hard Disk Cafe.

See you there!

Andrew Farrell

Epson LX 400

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Yes, all 68040 CPU's are created equal but this doesn't mean that all accelerator boards allow your A3000 to make the most of the 68040 CPU's incredible performance.

The A3000 was designed to work with low-cost, 80ns DRAM (memory) technology. As a result, anytime the '040 CPU accesses the A3000 motherboard, memory lots of CPU wait-states are introduced and all the reasons you bought your accelerator literally come to a screeching halt!

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▶ 68040 CPU running at 28Mhz providing 22 MIPS and 3.75 MFLOPS! NOTE: The 68040 incorporates a CPU, MMU, FPU and separate 4KB data and instruction caches on a single chip. 0 to 8MB of onboard, 40ns, non-multiplexed, DRAM. Fully auto-configured, user-installable SIMM modules lets you expand your A3000 to 24MB!

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UPDATE COLUMN

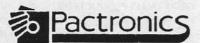
This update column is coming to you from the other side of the globe. I am currently in London and have arrived here from the Comdex expo in the good old US of A. There are so many brilliant new items coming up it's amazing. I'll be letting out details on just some of these when I return.

One thing that is immediately obvious here in England is that Wordworth V1.1 has become the premier word processing package for the Amiga. All of the new features (Postscript support, outline font support, improved spell checker/thesaurus performance, page preview, thumbnails etc.) have combined to make it the smoothest, most polished word publisher around. As part of Digita and Pactronics commitment to this product, we are proud to announce the initial release of the Wordworth registered users newsletter. This is a fabulous 50 page booklet on the history of the program and is also crammed with hints and tips on how to get the most out of Wordworth.

Also from Digita is the latest version of their best selling personal finance package, Home Accounts II. Using the Human Interface Protocol pioneered in Wordworth, Home Accounts II is simple to setup, amazingly easy in day to day use, but retains ALL of the analysis features and functions that you would expect from THE top Amiga accounts program.

If you'll pardon the pun, VROOM has taken off in a huge way. If you haven't yet seen it, do yourself a favour and have a look! It's just sooooo fast.

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Runbles

Welcome to yet another column filled with Amiga spottings and Commodore sightings. What's that? You can see one in front of you right now? Quick, jot it down, fax or write us the details and your name can join the ranks of those now famous contributors to Ram Rumbles Media Spottings column!

From Neighbours

Kicking off this month's eyeball Amigans is Ben Baker, a Neighbours fan and ACAR reader. Ben writes: I was reading your Media Spottings section and remembered seeing the Amiga on the soap Neighbours on Channel 10. In Paul Robinson's office lies the Amiga 500 in all its glory. Loaded up was Workbench and they never use the mouse, only the keyboard.

In one episode the Amiga had caught a virus and some of Paul's business was lost. But thanks to a whizz kid down the street all the information was retrieved (after a few taps on the keyboard). They even thanked Commodore in the credits (I think they do every episode). Would you believe there's even a Neighbours computer game for the Amiga.

Well Ben, thanks for the info. Several people have reported this sighting before, although I think you're first with the virus angle. As for the game, did I miss something?

Multiple Sightings

J. Chan of Fairfield writes of several Commodore sightings: Here are some spottings I saw of the Amiga and C64. In Betty Boo's film clip "24 Hours" a SX64 is spotted at the beginning. At Homeworld II in the Allworth Office an Amiga 500 plus 1084S plus 590. During school, seven Amigas can be found in staff rooms, computer rooms, art rooms, music rooms and the office. CDTV article spotted in the Computer Section of the Sunday Telegraph,

15th March, 1992 page 12. Last year I spotted an Amiga 500 with an 1084S monitor at a place that sold cigarettes running something called Graphic Craft at Neeta City.

Well thanks to J. Chan for those sightings. I have seen an Amiga at a dive shop nearby too, but I'm afraid we can't match your cigarette shop.

Amigas Out Of Africa

P. Zajax reports: On March 13 I was looking at Channel 7's 11am and they had an issue of 'Whites' in South Africa who wanted to stay totally independent ... they showed us the lifestyle in the country areas including the schools of these whites, and in the classroom there were computers, lots of them! The picture was only on for a very short time but I counted at least 20, if not more, A500's all in rows for use by school children. Then one of the school children was inserting a disk into df0: on the side, ah yes! definitely A500's. Regardless of South Africa's policies, I think that the Amiga has made a large impact in South Africa according to those pictures on Channel 7's 11am.

Also, keep up the good work on your excellent magazine. A great all-round Commodore-Amigamagazine and what's more, all Australian.

Thanks for bringing us that long distance sighting! We're not racial here at ACAR. But we won't publish any Atari sightings, so don't bother sending them.

CDTV Family Fight

A quickie from R. Close: A CDTV was offered as a prize on Family Feud of Thursday March 12, 1992.

At The Sheraton

Obe R. Lambert, with time to kill at the Sheraton, writes: During a recent stay at the Sheraton Hotel Brisbane I came across an Amiga Workbench screen on the television in my room. The Workbench showed accessibility to a hard drive but gave no other indication as to its application at the hotel.

Enquiries of the Audio-Visual Department were unsuccessful, however I assume it may have some use for providing information services to guests. Maybe someone can shed some light on the Amiga's use at the Sheraton.

So folks, there you have it. Proof that Amiga is out there, pulling its weight. Keep it up Ami!

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AX-RAM Four

The only four meg expansion system for the Amiga 500 is AX-RAM Four - as an added bonus you also get two meg of Chip RAM. Designed for installation in either a revision five or six Amiga 500, AX-RAM utilises the internal expansion slot, leaving the external slot free for hard disks and other peripherals.

Workbench 1.3 and 2.0 are fully supported and the unit will operate with either the standard one meg Agnus or the two meg Agnus as fitted to the Amiga 3000. An Amiga 500 with AX-RAM Four, two meg Agnus and a GVP Series II A500HD8+ would provide the user with 12 meg of RAM.

AX-RAM Four is the successor to AX-RAM, a two meg expansion system for the A500. Both systems have been designed and manufactured in Australia.

Reliability of the units has proven to be outstanding and full manufacturer's support is always available.

With recommended retail prices of \$195 (0 meg), \$345 (two meg) and \$495 (four meg), AX-RAM Four represents excellent value for money.

Currently under development is AX-2000, a unit to convert the Amiga 2000 to two meg Chip RAM. At this stage, the unit will require installation by a technician but eventually a user installable version should become available. AX-2000 should be available by the end of March and will retail for approximately \$330 fully installed including the two meg Agnus and RAM.

Available from S.E. Watts Electronics, 5 Dorchap Court, Hoppers Crossing, Vic 3029, telephone/fax (03) 749 3231.

Confusion Rules Over New Amigas

Despite the number of rumours, Commodore remains tight-lipped about the existence of new Amigas. At this time it is impossible to tell whether specifications floating around the traps now are seriously bogus, or leaks from within Commodore. As such, all of the following information is merely unconfirmed rumour and as such should not be used as the basis for any purchase decisions you could be caught waiting for a non-existent machine.

Possible models now include the 300, 300 Plus, 500 Plus, 600, 1000 Plus, 1100, 2200, 3000 Plus and 4000. Take your pick. Our guess is at least three of the above mentioned numbers are correct.

The 300 appears to have evolved into the 300 Plus which may well have progressed on to become the Amiga 600 see poor quality photo on this page. This machine is the next C64. A low price, expandable machine which may well supersede the A500. We might see one by the World of Commodore Show, but my guess is they won't turn up in quantity until late this year. Who knows where this puts the A500 Plus which is now shipping everywhere except Australia.

Specifications might be something like this:-A500 Plus functionality; Smart Card slot (like CDTV); LEGO; A cartridge port (with talk of possible fax and modem cartridges), built in IDE Hard Drive support (with room on board for one of the new laptop style hard drives); No numeric keypad; Mouse and Joyports at the right hand side (like the C64 and A3000) and a new 68-pin expansion bus.

Price suggestions vary, but with the majority of components now surface mounted on the PCB (no sockets), RRP could be below \$500.

If Commodore can pull this one off, they may well have another C64 on their hands, a machine which sold over 10 million units world wide compared to three million Amigas. If the price is low enough, it could also give Sega and Nintendo a good kick in the pants.

Commodore's home ground has always been the entry level market. With the A300 Plus/600 or whatever it turns out to be, they could well win back some of this lost turf. Of all the new models, this is the only one we think will arrive in the near future with any certainty.

A lot less likely, but a certain replacement for the A2000 if it does arrive, is the A1000 Plus or A1100 (is Commodore purposely starting all these rumours or is someone else making it all up?).

Features on this non-existent model include a slim line 286-style case; V2 ROMS; built-in SCSI controller; AA chip-set compatibility - more on that

Correction: Technosound Turbo

The Technosound Turbo is designed and manufactured by a UK company called New Dimensions and distributed in Australia by Kaotic Koncepts Pty Ltd. Unfortunately the review of the Technosound Turbo in our April issue referred enquiries to Nonchalant Designs, who have released a different sound digitiser on the market called Phon v.5. Technosound Turbo is released by Kaotic Koncepts Pty Ltd, phone (03) 879 7098 or (050) 94 6358.

The product does not normally come with audio jacks, but Kaotic Koncepts have been enquiring of people whether they have audio jacks when they place their orders and have in some cases supplied them free.

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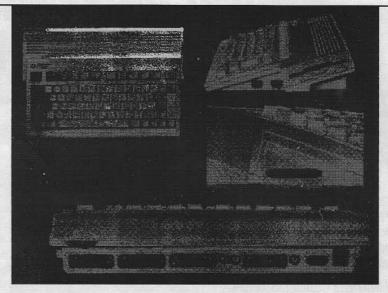
1st Floor, 257 Hawthorn Road, Caulfield North, 3161 Phone: (03) 532 8553 Fax: (03) 532 8556 Amiga is a registered trademark of Commodore-Amiga, Inc.

New Amiga Coming Soon

Just prior to our press deadline we managed to get our hands on the real specifications of the next Amiga we will see. This is for real. It will be here before the A300. Expect to see the Amiga 600 at the World of Commodore Show.

This new machine is an upgraded Amiga 500. It will still use the same 68000 processor, and have Amiga 500 Plus functionality. There's a new custom chip called GAYLE who will look after the built-in IDE hard drive! One megabyte of Chip RAM is standard, however there is no expansion-port on the left side but a "FLASH-RAM/ROM-MEMORY-CARD" port. You will be able to fit 2.5 inch hard drives, ranging from 20 to 180 Megabytes in size.

All chips, except the Kickstart ROM, are Surface Mounted. This means that there are no sockets available to use third party add-ons or the kludgey memory expansion that requires piggy backing RAMs. It also means the build cost is down.



The new Amiga 600?
This picture arrived via electronic mail - source unknown

The A500/A1000 style side expansion port is no longer. There is no place to connect expansion devices that use this port. Perhaps Commodore is going to try and corner the add-on market again, however I think this will create

some bad feelings within the industry. There is a TV-Modulator built in now and there is an F-BAS Port too (who knows what it does?)

RRP will be under \$500.00.

TIFF files, defines text and graphic areas, includes four different linguistic databases (English, French, German and Dutch) and lets you create dictionaries for multipage documents having the same type of characters. Requires 2MB of RAM and a hard disk.

Also from Migraph comes a combination hardware/software "Merge-It" and "Scanning Tray" (US\$149) letting you scan full-page graphics and merge them to create one composite image.

Also released is the V 2.0 of Touch-Up, the hi-res scanning and image-editing program - there is now a custom screen and an image viewer to preview IFF files. Pactronics (02) 748 4700 may be importing these products any day.

Video Editing on a Budget

MediaPhile 2.0SA is the newest addition to the MediaPhile family of video deck controllers from Interactive

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The MediaPhile 2.0SA controller has one remote control port input, an infrared control output, an output for Sony "S-port" and JVC "swap-port" control, and one SMPTE time code input. It plugs into the computer serial port.

Available from MicroSystems, Inc. For more information call Arthur Von Heffen on (047) 842 305.

Seduction Opera

The 'Seduction Opera' appeared recently as part of the Adelaide Festival and is an exciting and accessible two part opera for a new age. Brilliant IBM generated music by composer Martin Friedel and equally good soprano by singer/actor Jan Friedel.

The provoking video artistry is produced by Marshall White using Amiga 2000's and really has to be seen to be believed. Lots of live camera, ray-tracing and 24 bit animation is involved and all elements are timed to a split second.

Tour dates will be announced soon. It is sponsored by Power Peripherals in conjunction with GVP.

Marshall runs regular classes at Northern Metropolitan College of TAFE in Melbourne covering animation and desktop video. For details contact Con Kostaris at ITAM (Interactive Training and Media) (03) 270 1748. An interview with Marshall is in issue one of the Australian Amiga Disk Magazine.

Submitted by Shane Sodeman, editor of the Australian Amiga Disk Magazine.

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SCALA Wins Prize for Creativity

"Scala is a cheeky innovation in a market dominated by expensive and complicated systems," said the chairman of the jury, when Scala was awarded the Creativity Prize in Oslo on February 5.

The prize is awarded by The Norwegian Computer Society, The Norwegian Trade Council and the Norwegian Research Council for Science and the Humanities. It is meant to inspire creativity in the software business. In addition the prize money (US \$16,000) the winner gets free export advice.

"In a short time Digital Vision A/S has managed to export a considerable number of this product," said the chairman of the jury, Managing Director Petter Gottchalk.

He added: "One reason why the jury has chosen Scala is its creative simplicity. It has a potential for export, it is suitable both for the business and the consumer market. Scala is inexpensive, it is easy to start up for the user, and the product development of Digital Vision has been directly aimed at the clients."

There were 25 candidates competing for the Creativity Prize, which was awarded for the second time this year.

The prize was received by Marketing Manager Einar Haugstad, on behalf of Digital Vision. Sverre Lindtvedt is Marketing Director of the Norwegian Trade Council. He stressed the user-friendliness of Scala before he handed over the prize to Mr. Haugstad.

"Scala is far better than other systems. Digital Vision has in short time managed to build up a marketing organization, and the product has been distributed in an efficient and convincing way on several markets," said Mr. Lindtvedt.

Scala is a multimedia program for the Amiga that provides all the tools required for professional screen presentation and video titling. It is equally useful in education, general information and in-house training.

Scala was developed by Digital Vision of Norway, a software company with branch offices in Denmark, Sweden, England, The Netherlands and the

Royal Bank of Scotland Turns to **SCALA**

The Royal Bank of Scotland has decided to use Scala software for the testing of new, interactive screen information systems. The presentation program Scala is now under evaluation at the bank's information department in the Edinburgh headquarters.

The Scottish bank is one of the first major banks to purchase Scala, says Einar Haugstad, the Marketing Director of Digital Vision, the Norwegian software producers specialising in multimedia.

The testing in Scotland is interesting, because the bank management has indicated that all branch offices eventually will install interactive terminals.

A customers' information point in all banks will provide details on accounts, interest rates, mortgages etc. The customers get all desired information by simply touching the screen.

Interactive information screens are being used in many new branches. These systems are undergoing a fast and exciting progress. A growing number of people seem to realize the potential of onscreen information, says Mr. Haugstad.

An interactive Scala system is used at the new Maastricht University Hospital in the Netherlands, where visitors get the desired information from touchscreens. Scala is also used by the H J Ford Associates Institute, Washington, where high-ranking Pentagon officers

At the Olympic Games in Albertville, France, IBM provided information terminals.

"Our solutions are far better, because they are based on Amiga, the number one multimedia machine. It responds much faster than other computers", explains Mr. Haugstad.

Portions of Notepad are contributed by Megadisc editor, Tim Strachan. Thanks Tim!







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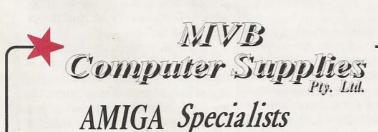
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Letters Letters Difference

PC Comparisons Inaccurate!

Some of your readers would not make great shoppers. Bernard Toohey compares "a 25Mhz [PC] with a 42 meg HD for \$1350 or less" with "an A500 with 7MHz 68000 and 20 meg HD at \$1600". My estimates are: 25MHz 386SX with 42 meg HD for \$1500, compared to an A500 (\$600) plus ICD 40 meg internal HD (\$640) plus monitor (\$450) plus KAOS 14MHz Accelerator (\$95) for a total of \$1785. However, a 386SX is not fast enough to run Windows or some of the better PC games, upgrade to a DX, cost \$1800. Then, our PC still does not have a mouse. Add a mouse and its card for \$150. No sound yet, so get a sound blaster (\$199). But we don't even have an operating system! - so buy Windows for \$150. Total cost of our base PC game machine \$2300.

Now, the PC has better graphics (640 \times 480 \times 256 colours effective, compared to A500 640 \times 256 \times 16-32). It is also faster (25MHz-14MHz). However, it is also \$500 more expensive!

Furthermore, it has no sprite technology (read, not many good arcade games). Also, the A500 does not need the HD to function, whereas the PC does. Subtract \$640 from the A500 if you choose, for a total cost of \$1145. At the price the PC is not even in the hunt.

I also checked out T. Riffat's figures by comparing the 386DX with a

A2000HD fitted out with deinterlacer, VGA monitor (multisync not necessary) and the VXL-30 accelerator. I came out with a difference of \$515 in favour of the 386 versus his absurd difference (for a similar configuration) of \$1975! My figure of course does not take into account the Amiga's blitter chip, multitasking, six free expansion slots to the PC's probable one or less, or indeed secure source of servicing and parts.

Nevertheless, the latter comparison is not favourable. The great obstacle to mainstream acceptance for the Amiga remains the low resolution and the high cost of improving it. To that end, Commodore must fix the interlace flicker, and on all Amigas, and do it economically. More colours are also important, but if the resolution isn't improved, forget it. A faster CPU is now necessary to compete, and a cheap, internal HD option for the A500 would be a bonus. Failing these changes, market forces will see to it that we pay less for our Amigas in future.

S. Hutley, Hawthorn, Vic

Ed: We couldn't agree more. I have many letters which quote seemingly ridiculous price comparisons. Many people are not aware of the PC's short comings. However, the general perception is that the PC is better value for money. I believe, like you, Commodore must address this situation. The A3000

was selling for as low as \$2995 in Sydney - add a VGA monitor and at around \$3500 you have a machine which would give any 486DX at about \$3000 (with sound card and O/S) a run for its money.

Of course, Commodore argue that at entry level, there is no competition for the A500 at around \$600. XT's are no longer available. However, many people are looking for a machine in-between, with hard drive and a stable high resolution display. Here is where the Amiga needs to do some catching up.

However, despite the obvious price difference, the Amiga still represents a far better machine for home use.

Are You For Real?

Seems your magazine needs a boost in circulation. I think that including a free copy of your magazine with every Commodore computer sold in Australia would go a long way and another thing, why don't you advertise in software packs. I know I'm a pain in the neck but I just don't want to see a good magazine lose ground on the opposition.

This is the present, we must look to the future, so how about releasing your magazine on floppy disk with graphics and demos on it.

Regarding your publication in the month of January 1992, the pictures were of a low quality, some of the articles boring and repetitive. Your advertisments are the same type print every month, which leads me to the conclusion that it needs help and fast.

Item two, if you want to increase your sales, then try putting a good looking girl on the cover, different every month, replace your ads with new ones, give away free boxes of disks, in competitions every month, a sample give away program now and then will be great, more in-depth articles on hard drives and system updates.

Puta serial number on each magazine and then give away a new computer to some lucky reader every edition of your magazine. The price of one computer is not going to break the bank when you put it up against the volume of sales it will generate.

Talk to the big software companies, they may be interested in participation in the competition.

We do need better pictures in this day and age, even the daily paper has better print on it. A column on BASIC programming is okay, articles on road testing blank disks, which brand is the best, the inside look of the manufacture process of Amiga computers, a more indepth look at frame grabbing and how it's done in layman's terms, a rundown on monitors and the price and quality of them, a monthly games program in computer jargon that builds to a full segment over three months or more. You need life to be put into your magazine to change the format every month.

Take a look at some of the womens magazines and how they change with the times, a monthly article written by one of your readers with his picture is of interest. The best article wins a hard drive, CDTV, a printer, who knows what you can do, maybe you should start trying.

M. Harvey, Tregear, NSW

Ed: It's great to know people like you care about our future. We'll take your suggestions to heart. Any women who wish to volunteer for our cover, please call or send a photo of yourself to the Editor, P.O Box 288, Gladesville 2111. Companies wishing to supply free disks, computers or other gear we can give away, should deliver them in an unmarked brown box to my house.

Warm Fuzzy Feeling

I am an Amiga 1000 owner and read your magazine every month. Everytime I read the magazine I get this warm and fuzzy feeling that maybe I was not an idiot for buying an Amiga and there will be a strong future.

However, every time I go to buy something the feeling is quite different. Most outlets have relegated the Amiga to the back shelves or to nowhere - in favour of IBM.

I have rung Commodore with my concerns about the future as I an now in the market to upgrade my A1000. Their response was "we are number one in Europe - maybe you should upgrade to an A3000." Why should I?

I like the Amiga, however my family and friends all have PCs. Amiga is being slaughtered on price by the PC clones.

I would like to go to Sydney to see the World of Commodore show - am I wasting my time?

What is your advice to a confused and frustrated Amiga owner?

P. Kaspar, Dandenong, Vic

Ed: Go to the show! You will find what you're looking for. Do buy an A3000 if you can. It's a great machine.



Amiga Annual 1992

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Flawed Art Down DPaint Road?

Is version IV of Deluxe Paint all it's cracked up to be? Can we safely move onward and upward? What's new and what's not? Graham Bowden treads the careful path across the reviewer's new product minefield.

o you've read the previews, considered the options and are about to part with the pennies for Electronic Arts latest incarnation of *Deluxe Paint*, the new you beaut *DPaint IV*. How good is it? Is HAM, morphing, light table, process and translucency worth the upgrade?

Without doubt the answer is an unequivocal and resounding YES. Ah, but sadly we must add a small codicil here. PURCHASER PLEASE NOTE: Don't throw away the old *DPaint III*. Not just yet anyway.

Past Experience

Deluxe Paint has undergone two previous upgrades which brought us firstly DPaint II, then DPaint III. Both these advances were exactly that in every way. That is, they were advances. If improvement was required things were improved and if extras could be added extras were added. Witness the improvement in font requesters and the breakthrough to animation in the DPaint III upgrade. I found that once I'd started using DPaint II, I never returned to the original DPaint. Neither was there any reason to return to II once III was released. So what's the problem with Deluxe Paint IV then?

Before beginning, let me just say this. As intimated above, *Deluxe Paint IV* is most definitely a much improved software package when compared to III and is unquestionably the preferred package for artistic Amiga artisans. However,

depending on the application, there are times when III would be my software of choice.

Okay, life's full of little ups and downs and you've got to take the good with the bad. In this report we'll deal with the bad first and the good last.

Problems

Some of the problems associated with IV are occasioned by the increases in available effects and modes and, to borrow a phrase from Pidgin English, can be considered as "something-nothing".

For instance the program takes a little longer to load now and, as I understand it, requires 422K of memory in NTSC 32 colour mode plus an additional 20K if you're using an external drive. This means that if you're running only 512K then expect a visit from the Guru with monotonous regularity. In short, a meg is a must. I guess that's a serious problem if your system doesn't run to one meg but hey, this is a pretty powerful program and to have it running, and running well, on that meagre meg of memory is still quite an achievement.

It's after it gets going that the niggles begin. The first thing that struck me was the palette requester. With the advent of HAM and its 4096 available colours, something had to be done to allow the mixing and viewing of all those shades. Unfortunately we end up with a situation where to select a colour range now requires a separate range requester.

Oh, there's a keyboard shortcut (Ctrl-

r) to call it up, but it all takes time. The palette requester itself still appears after tapping the p key but takes a lot longer to load than of old. If you're simply drawing in a non-HAM mode and IF you don't require any of the fancy new fill patterns then DP3 may be preferable. The big "if" is reserved for the extra range and fill patterns discussed later.

Doubtless you've all heard the adage "when all else fails refer to the maker's instructions". I thought the HSV sliders had been removed from the new palette requester and consigned to free radical electron land until a brief consultation with the manual suggested clicking on the vertical RGB button to the left of the colour sliders. I tried it and sure enough, there were the good old HSV sliders.

Having the palette requester in HAM mode, no matter what mode the screen is in, has allowed another innovation. In the lower right is a colour mixer.

Just select a colour from the palette and paint it down in the mixer, then select another colour and paint over the first. The two colours mix together forming a third which can then be picked out of the mixer area (keyboard ","). The colour will be added to the palette area in whichever box is currently selected. Additional features of this requester have been covered in other reviews so let's go to the range requester.

Out On the Range

Yes, the range requestor is improved. It now has the ability to select any palette colours for your preferred range and there are now eight ranges available. Whereas all previous *DPaint* releases could only use a series of colours which were adjacent to one another in the palette, *DPaint IV* allows the use of non-adjacent colours. However, the very ability to choose non-adjacent colours has flawed the cycle function.

Try this. As you select several non-adjacent colours from the palette for your range, place them on the range bar so that there are a few blank spaces between the selected colours as I've shown in figure 1. Choose "show" to see what the range looks like. Note that

DPaint has picked some intermediate colours from the palette to graduate between those you chose. Specifically there's a shade of brown between the red and the green.

Herein lies the problem. Colour cycle, as with *DPaint III* etc., only works on created ranges of colours. If no colour ranges have been made and used on screen then pressing the tab key will have no effect. Trouble is, the only colours which cycle in *DPaint IV* are those you selected. The additional colours (in this case brown) which the program chose itself, don't cycle with the others. Not good.

Also not good, but not as serious as what we've just discussed, is the default speed setting for colour cycle. Note in Figure 1 that it's nothing, zilch, static, no speed at all. So you make your range selection, use it on screen, hit the Tab

key to initiate cycling and nothing happens. Ah sh-sh-shucks. Ctrl-r to bring back the requester, wait a while for it to appear then select a cycling speed greater than zero. That's better, now we're pumpin'. But what a waste of time.

To be fair though, there is absolutely nothing to stop you from painting with either the Palette requester or Range requester selected. Unlike earlier versions which required any and all requester windows to be closed before painting was resumed, *DPaint IV* allows these two to be open.

Unfortunately they impinge on the drawing area at the bottom of the screen and cannot be moved about the screen as the requestors of old. Ah well, we can't have everything but please Mr. EA, let's see a default speed that does something with the colour cycle function.

One More Niggle

It used to be, that to select a different range of colours to use with cycle draw or range fill, one simply selected, as the current foreground colour, a hue which was within the range one wished to use. If a rainbow of reds or a band of blues had been made into a couple of colour ranges, changing from the red range to the blue range on the fly merely meant choosing one of those reds or one of those blues as the current foreground colour. This no longer holds true.

DPaint IV demands that one goes to either the fill requester or the range requester to select another colour range. Yes, it takes up precious time but it is I think, unavoidable. And why is this so? Well, how are the little colour gurus in there going to decide which range is to be used if the same colour was used in

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Figure 1

more than one range? Didn't think of that, did you?

Perhaps the habit should be developed to always have the range requester open when painting and forget the space covers at the bottom of the screen.

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It's not all Bad!

Is there then, anything attractive about the new Range requester? Heck yes! As stated earlier, being able to choose any old colours for the range and having eight ranges to play with are plusses, and last but not least is the new and impressive pattern dither for transition between colours. Look again at Figure 1 to see how this particular effect far outstrips the old random dither for result when using range fills, and of course the good Lee Taran, who, by the way, has replaced Dan Silva as head of DPaint design, has kept random dither as an additional effect anyway.

Let's conclude the complaints with these final two, one minor, one kinda major. The minor malady is really a bug and is easily worked around and will, in all probability, be fixed in the first upgrade. It concerns selecting the fill tool and the fill requester when in magnify mode. See Figure 2. - Which by the way, I've really only included to show the results that can be achieved by a non-artist such as myself or perhaps yourself when using *DPaint*. It only takes a little patience as I hope to show in coming months.

Whenever I'm composing a masterpiece in Hi-Res mode, a large chunk of creative time is spent performing detail work on a magnified screen. This often necessitates swapping between pattern fill, various range fills and solid fills. I quickly discovered that a bug existed if the fill tool had already been selected then the keyboard shortcut <shift>-f was used to call up the fill requester. Selecting a new fill type then returning to the magnified screen caused the fill tool to be de-selected as the fill requester closed.



Figure 2

Without dwelling on this, let me say the problem doesn't occur on a non-magnified screen nor if the fill requester is called up via a right mouse button click on the toolbox icon rather than using the keyboard. To quickly re-select the fill tool on a magnified screen simply slip the mouse over to the left-hand (non-magnified) side and hey presto, "fill" miraculously re-selects

More major though is the "shade" drawing mode found, naturally enough, under the "Mode" menu or by hitting f5. The manual doesn't say so but shade does not operate in HAM mode. In fact the menu item is ghosted when HAM is selected. Although this is a disappointing omission there is quite likely a genuine reason for it.

The main gripe though is in the way that shade now operates. In previous *DPaint* releases shade could be used on a specific range of colours or the entire palette could be used if a colour which didn't belong to any range was selected.

Newcomers to the *DPaint* ranks may find that last sentence difficult to comprehend. Don't worry, an upcoming article will explain the intricacies of the shade mode. Suffice it to say for now that in *DPaint IV*, shade only works with created colour ranges. Those are the ranges made via the range requester and again, to change from range to range requires the user to step into this requester or into the fill requester. It all takes time. The shading effects shown above the requester in Figure 1 were done with *DPaint IV* and those below with *DPaint III*.

The central Olympic Rings, squares and the Ampersand in the lower half could not be produced with *DPaint IV* unless the entire palette were made into a cycle range. *DPaint III* does it by default if a colour outside a range is selected as the foreground colour.

Re-capping then on the Don't Likes ... Colour range selections can no longer be made on the palette requester; Changing ranges requires returning to the range or fill re-

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quester; The default range cycle speed of zero is infuriating; The effects of the shade mode have been arguably reduced; There's a glitch as the fill requester closes under certain circumstances; And lastly, even if the program is not operating in HAM, everything works more slowly than *DPaint III*. So much so in fact, that if I'm simply painting a picture such as that shown in Figure 2, I may do most of the work in *DPaint III*. After all that though, don't think for a minute that you don't need *DPaint IV*.

And Now The Good News

These are just some of the reasons why HAM mode is here at last. Load and Save features now have keyboard shortcuts and double clicking on files selects them. Brush morphing allows us

all to emulate a Michael Jackson video. The light table as an aid to animating plus the animation control panel for apprentice users.

The new pattern dither along with several glorious new directional gradients for use when "fill" is selected. The ability to paint down stencils with any custom brush or filled shape etc. without regard to particular colours. Translucency which makes fast and fancy reflections and wonderful fading effects.

Under the Mode menu is the new "Mix" mode which produces peachy effects especially in HAM, and how did we ever live without the new mixing area in the palette requester.

Then there's the most important reason of all and the one I've left until last. Value for money.

Ever since the latter days of *DPaint* III and now with *DPaint IV*, Electronic

Arts are giving even we poor Aussies great value with this feature packed software. For anyone even moderately interested in electronic painting *DPaint IV* is on top of the pile. It's the one to beat and well worth the dollars.

For The Future

I mean look, it's taken just one article to dwell on the shortcomings but will take months to cover the advantages. Time permitting I hope to enlarge on those advantages along with a few tricks and tips to enhance even the most basic art from the most basic artists ... you and I. We'll occasionally slip into one or two other art packages along the way as well. Look forward to it.

PS ... Just between us, I must confess that *DPaint III* is being used less and less. Don't tell anyone else though.

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Introduction to Music

by Daniel Rutter

ou read the reviews. You saw the advertisements (both of them). You listened to the salesman. And you bought the Amiga.

Why? Games, maybe - check, no problem. Graphics - Deluxe Paint 3 or 4, once again easily dealt with. Word processing - plenty of good stuff out

there. Music. Urgh!

Suddenly the salesman starts saying Sonix, Bars And Pipes, Deluxe Music, SoundTracker, ProTracker, Noise-Tracker, DrumTracker, SuperJam Tiger Cub, MED, KCS MIDI, Instant Music, Alter Audio ... and it's information overload time.

This article aims to clarify the basics of music on your Amiga. It gives a brief synopsis of the strengths and weaknesses of some of the most popular packages in alphabetical order, and a brief glossary of terms at the end.

ALTER AUDIO - This is Commodore's proprietary audio package. It contains a solidly built MIDI interface and Doctor T's Tiger Cub sequencing software. Tiger Cub is not a new program, but it is a competent one and not too overbearing for the new user, particularly with the help of the large manual and instructional cassette, which steps you through Tiger Cub the easy way (if you can stomach the folksy American voice over).

In order to use this package, however, you must have a MIDI synthesiser as well as your Amiga. This makes it a major step for the average purchaser, but the results are much more impressive.

The inclusion of MIDI interfacing hardware is very unusual - the Alter

Audio package deal is the only product I know of which bundles software and hardware together.

BARS AND PIPES - This, and its cousin Bars And Pipes Professional, is an enormously powerful sequencer from the Blue Ribbon Soundworks. It has avoided the adding machine appearance of older efforts by keeping the entire interface very graphic in its approach. However, there is no way to make such a powerful program instantly accessible to the average user, and so serious practice on simpler packages is recommended before you tackle this monster.

Up and Running

To get started all you need is your Amiga, which has its own inbuilt sound synthesiser. Programs like Sonix, MED, SoundTracker and Deluxe Music work fine without any other extras. MIDI software will need a MIDI interface and MIDI keyboard synthesiser - Commodore's Alter Audio includes the interface, all you need to supply is the MIDI keyboard

Once again, you'll need a MIDI synth to use it, and the results are truly professional in the hands of someone who knows the program well. Definitely not for the beginner, though.

DELUXE MUSIC COST-RUCTION SET (DMCS) - This is a very elderly program, dating right back to 1986. Despite its age, though, it only has two glaring faults - it is SLOW in a major way, and it won't multitask properly. If you're willing to put up with these problems, though, it is still a very powerful package, which allows you to use traditional musical notation with notes down to demisemiquavers and all the rest of the esoteric compositional garnishes beloved of conventional score writers.

It can work very well with a MIDI interface, though not quite as flawlessly as the dedicated MIDI sequencers, and it is equally at home using the Amiga's internal voices. If you can put up with a somewhat cumbersome interface, DMCS is still a very practicable option

for Amiga composition.

THE MUSIC EDITOR- or MED as it is invariably known, is available in three forms, one Public Domain, one Licenseware (like PD but you can only buy it at certain places), and one commercial. The PD edition is easily the most powerful non-MIDI sequencer on the Amiga. While it can and does interface quite well with MIDI, if you've already shelled out on the interface and the synth you might as well spend a bit more on a dedicated sequencer.

MED's features have been extolled before in many articles and there isn't the room to mention them here - but if you're after a ridiculously cheap, tremendously powerful and well documented (often a problem with PD) music package, MED is the way to go.

The LicenseWare edition is called OctaMED1.0, and allows eight tracks of music to be squeezed out of the Amiga's four voices by real time mixing. It is basically intended as a sample of the power of the full commercial version, imaginatively titled OctaMED2.0.

Both of these programs have all the power and flexibility of the original MED, and are well worth considering. But get yourself a cheap copy of the four track version first.

MIRACLE - This is an integrated piano teaching package, which comprises a small, four octave synthesiser (whose small size belies its remarkable capabilities), a proprietary parallel port interface for the same (not MIDI), and a very, very good software package.

It is not designed to be used as a compositional package although it can be in a limited way. It is designed to teach you to play the piano, and it does so astonishingly well.

Enough plaudits have been heaped upon this system so I won't add to the pile any more - but if you want to learn to play, this is how to do it.



The Miracle package also leaves you, once you've mastered every lesson (distant laughter), with a perfectly serviceable MIDI synthesiser, which you can of course use highly successfully with the dedicated sequencers or any other package which supports MIDI.

Note, however, that you will need to purchase a separate MIDI interface in order to do this, since the Miracle's parallel port interface works only with the Miracle software.

SONIX - This is another of the old standards, and an excellent program for the beginner. It operates like a cut down version of DMCS, and operates via the standard musical stave as DMCS does. However, it is not as flexible in its compositional options, and its MIDI implementation is a lot less exciting.

On the up side, though, *Sonix* is a great deal easier to use. It is much faster. And it includes a very good inbuilt synthesiser using the Amiga hardware so that anyone can make their own sounds without having to sample them or get them from someone else.

Sonix is a startling example of the philosophy that more is not necessarily better, and is well worth getting if you want a quick, painless and fun initiation into Amiga music.

SOUNDTRACKER - This, and its cousins *Protracker*, *StarTrekker*, *Noise-Tracker* and umpteen other clones, is the

standard PD music composition package. Originally created by hackers and crackers as a compositional program for putting music into games and demos, it has grown like Topsy and there are now literally thousands of tunes out there for the avid ST user to play with.

It is an older program than MED but shares many features; ST is actually quite a good launch pad for those heading forthe stratosphericheights of MED's abilities. It is not, though, a dreadfully easy program to get into, thanks to the paucity of up to date documentation and the inconsistent appearance of the various versions produced by different groups of coders for their own purposes and self-aggrandisement. Mind you, ST is PD, and so the price is indubitably right - it's worth having a look at, if only out of curiosity.

SUPERJAM - This is the latest product from Blue Ribbon SoundWorks, the people who brought us *Bars And Pipes*. The latest effort is a humanised version of the sequencer, whose basic idea is that you are the leader of a band which follows your chord changes and plays in a style you can dictate. It is a very powerful program in its own right, which works well with the Amiga's internal sounds and better with a MIDI interface, and it will happily run within *Bars And Pipes* as well.

For professional composition it's not so hot, but for fun it comes highly recommended by me - and even professional users will certainly find a place for *SuperJam* in their hearts, for it is quite useful for the sketching out of melodies and compositional ideas prior to their finalisation in a big sequencer. See my review of this package following this article.

Glossary

MIDI - Stands for Musical Instrument Digital Interface, and allows synthesisers to talk to computers and vice versa. The universal language of high tech music.

Module - If you're talking Sound-Tracker or MED, a module is a song file which includes all of its instrument samples as well, so that it can be played without loading the samples from all over the place. If you're talking synthesisers, a module is a synth sans keyboard, which is designed to be played only by a sequencer or a separate "master" keyboard. Synth modules are much cheaper than equivalent keyboarded machines.

Sample - A string of numbers which the computer interprets to make a noise, by passing the numbers through a DA (Digital to Analogue) converter not unlike that in a CD player. Or in the verb form "to sample", it means to pump music down a wire and into an AD (you figure it out) converter so that the computer can store it as, that's right, a string of numbers. This process can also be called digitising.

Sequencer - A program (or in professional studios, a standalone machine) which controls MIDI instruments. Amiga sequencers can do this or, like SoundTracker sand MED, can simply work with the Amiga's internal voices. The dead giveaway when identifying a sequencer is reams of numbers scrolling vertically or horizontally to describe the music, as opposed to the familiar notes on lines. Sequencers give far greater flexibility, but far worse readability. A printout from a sequencer is the next best thing to unreadable for live human player, but then it's not meant to be played by live humans, is it?

Stave - The five lines on which traditional notes are placed in the normal annotation of music. Some music programs allow you to view music in this way; others stick to the sequencer standard of pages and pages of digits.

Synthesiser - A machine for making musical noises, such as you see being used by rock bands or, in the bonsai domestic version, demonstrated by Chris Marshall on TV. Popularly abbreviated to synth.

Voice - A sound reproduction channel. The Amiga has four voices, allowing it to play back four sounds at once. Synthesisers, depending on price and vintage, can manage from six to a hundred-odd. IBM sound cards usually have something like 33, but usually all but one of these channels is restricted to the playing of the card's inbuilt instruments, and can't play back digitised samples.

SuperJam

The Sequencer For Human Beings

One of the big selling points for home computers down the years has been their ability to turn the average Joe into a lounge room Mozart by bringing musical composition to the masses. This promise has been, to be charitable, somewhat erratically kept.

Daniel Rutter examines a package which promises to help reverse the trend.

he first attempts at music composition on a home computer had to be done via interminable "SOUND 642,233,907,2" type nonsense, and later efforts were hindered by the innate shortcomings of the relevant computers' hardware.

But then along came the Amiga, with brilliant four channel eight bit sound. And along with it came a collection of often excellent composition software - Deluxe Music, Sonix, Soundtracker and various incarnations of those esoteric beasts, MIDI sequencers.

The problem was that none of these leapt out and said howdy to the above mentioned average Joe. Worst were things like *SoundTracker* and the sequencers, all of which looked like spreadsheets.

So what the music composition world has been crying out for, as far as the ordinary user is concerned, is a music composition package into which anyone can jump with the proverbial smell of the manual's cover, and be making an acceptable noise in ten minutes and composing a real, workable, listenable tune in an hour.

Is *SuperJam*, the new product from the Blue Ribbon Soundworks, that program?

On the whole, yes.

SuperJam is pretty (it shares the cheerful, almost chunky screen layout of its

bigger brother *Bars And Pipes*), intuitive in design and easy to get into. You load it, you select a Style of play, you set it going and voila! You've got a backing band which follows your key changes as you play, somewhat awkwardly, on the keyboard. There are plenty of different Styles included on the disk, from country to boogie to funk.

How It Works

The basic idea of *SuperJam* is that you are the leader of a band composed of Melody (you), String, Guitar, Keyboard, Bass and Drum parts, each of which plays in a key indicated by you but to a score of its own (which you can write

yourself or load from disk). Thus simple "jamming" - hence the name - really is an instant experience; load and go.

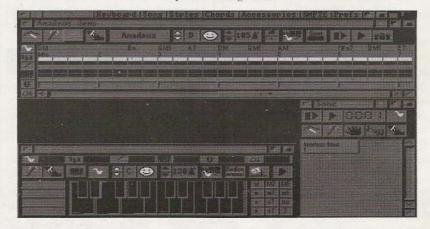
Not much harder is the recording of a live song. When the sound of your own fumblings gets a little tiring, you can sequence your song's chord changes and melody to get it just the way you want it.

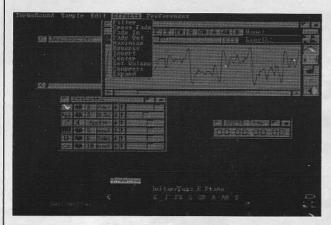
Songs can be saved in SMUS (Simple MUSic, as used by Sonix and DMCS) file format, or as MFF (MIDI File Format, usable by heavy-duty sequencers on the Amiga, Mac, Atari ST and IBM, and even by dedicated standalone sequencers).

And when simple song writing to someone else's Style becomes a tad tedious, *SuperJam* has an enormously powerful, yet not too terrifying, low level compositional side too. What you do is edit the tracks which the other band members play. They may sound spontaneous, but each one can only play what's been written for him by someone else. In the case of the included Styles (there are 30 of them), the composer appears to have something to do with a number of Hammond organs, too ...

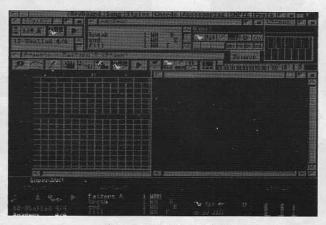
When building a new Style, you can define sequences (Patterns) which can be played anywhere or can be restricted to particular chords, or measures with chords on particular beats, or to the "fills" performed when particular players get the urge, or the order, to show off. Up to 16 Variations can be put into any given Pattern for a given player, and an unlimited number of Patterns can be put

SuperJam Song Editor





SuperJam Sample Editor



SuperJam Pattern Editor

into a Style. Fortunately, variations can be created in a sort of batched manner, meaning you don't have to painstakingly come up with a new and exciting idea for every single little bit of your composition unless you really want to.

The sound of the music you make is a little better than you might expect from

the Amiga, thanks to what are coyly called TurboSounds (why is everything Turbo these days?). These are regular Amiga sound sample files which include separate chunks for each note, allowing far more realistic playing in different registers.

This, however, is just a side effect of

the major advantage TurboSounds confer. Since the Amiga hardware doesn't have to muck about with the samples to get them to play on the right notes, it is possible to mix samples together at output, enabling your computer to play more than four simultaneous notes.

The actual number of notes that gets

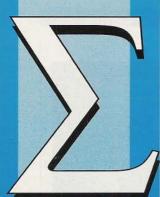
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played depends partly on available RAM but mostly on the speed of your Amiga - on a stock 68000 machine, the processor load created by just having SuperJam running leaves little room for the samples to mix. Thus TurboSounds really come into their own on a 68020 or better machine - but they're pretty darn good even on a bog standard 500. The maximum possible is 16 simultaneous voices.

Using Built In Sounds

Thirty one TurboSounds are included, and SuperJam allows you to take any IFF (Interchange File Format, the Amiga standard) sound sample and convert it to a TurboSound, with extensive editing features available. For example, you can make loops, smooth fade ins and outs, and tune samples which were inaccurately digitised.

An interesting associated feature is the confusingly named TurboSampling.

This allows you to perform a real time internal digitisation of your song at one of three sample rates, producing a perfect reproduction of the original which can be played on any Amiga with enough memory. This overcomes the problem of there being no redistributable SuperJam TurboSound player program, and makes it easy to include SuperJam songs in things like presentations and animations by using the included TurboPlayer, which is specially designed to play TurboSamples.

Mind you, SuperJam will happily synchronise with other programs provided you've got the RAM and the processing power. Arexx control is supported, using a cut down subset of the Arexx commands available for the control for Bars And Pipes Professional. SMPTE time codes (the standard set up by the Society of Motion Picture and Television Engineers) are also supported for professional applications. On top of

that, the rest of the synchronization Accessories from Bars And Pipes Professional are supported and included, allowing synchronisation with Imagine, Real3D and Dr. T's Phantom inter-

If you want to make really nice noises, though, MIDI (Musical Instrument Digital Interface) is the way to go. SuperJam supports MIDI brilliantly, Instant internal support is provided for Roland D-110, Miracle, Ensoniq SQ-1, Proteus-1, MT-32 and Spectra synthesisers, using the same Patch Name lists used by Bars And Pipes Professional. These operate by using program change instructions, not any oddball system exclusive messages.

Thus any name list will work on any synth - but the names of the instruments and what they actually select at the other end will bear only a coincidental resemblance. Fortunately, you can easily build your own name list (tedious,

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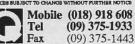
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but not complicated) which will allow wonderfully easy control of any MIDI synth or sound module at all. Note that the synth must be multi-timbral in order for the band to sound remotely plausible - but you're hard pressed to find a MIDI machine these days that isn't.

Drum maps are also supported, for synths which have internal percussion sections or separate drum machines. Building a drum map is a similar process to creating a name list, and about as interesting, but you need only do it once to have every drum flawlessly addressed by the band's rhythm section.

SuperJam works much better with MIDI than TurboSounds, as you'd darn well want it to after shelling out many hundreds for the extra hardware.

One of its larger markets will probably be the growing army of Miracle owners, wanting to get into some real composition now that they've an idea what this whole keyboard thing is about.

Note, however, that a MIDI interface is needed even for the Miracle - the standard parallel port interface works only with Miracle's proprietary software.

SuperJam will also run happily as part of Bars And Pipes, where it can be used for sketching out compositional ideas and seeing how it all falls together before doing the spadework. The program, though, is most certainly not just an adjunct to its larger sibling. SuperJam is a powerful package of an entirely new sort, which is good enough to warrant serious interest from professional and amateur musicians alike.

Documentation

SuperJam's manual is about 200 pages, well written and easy to understand. It also comes ready to be clipped into one of Blue Ribbon Soundworks' distinctive little ring binders, which makes it easy to handle and tough, too.

The initial tutorials are extensive and friendly, but the writers have avoided the trap of turning the whole thing into some demented narrative which is fun the first time but drives the user bananas if any particular data is hunted for.

SuperJam will run on any Amiga with one megabyte or more of RAM, and at least version 1.3 of WorkBench. Note, though, that it's much happier on machines with more than a megabyte. With more RAM it sounds better (sound on one meg is okay but not amazing), and also looks better, as you can use more screen colours without the polite little "Warning! Low memory!" requester popping up all the time. The program comes on three unprotected disks, one with the main files, one with extra songs, Styles and other stuff, and one full of TurboSounds.

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Getting into Desktop Video

by George Kimpton

he Amiga has broken through the perceived barriers of cost and opened the way for talented people without fat wallets to produce some outstanding videos. This has been particularly so in the last year or so with improved add on hardware and the great range of graphics, special effects and titling software that are now available. Watch for a special new software package in these pages soon that will make the Amiga fly.

There are currently a number of courses available to assist would be video geniuses to get their act together but not everyone can afford them. The next best thing then is to gethold of some good books and see what we can learn. The rest we will achieve with experience and experimentation.

The Book

Amiga Desktop Video by Steven Anzovin (Compute Books), is written with the beginner in mind but even those of us that have dabbled in video production can still learn something. If, like me, you have started the hard way learning as you go, you will become aware that there is more to video production than is obvious at first glance. This book can fill in a lot of those gaps in our knowledge.

For those real beginners the first chapter explains how TV or video works in some detail to give a better understanding of what comes later. This discussion even goes into the video waveforms, phase vectors, etc and their various components and how they work together. Perhaps a bit over some peoples' heads but interesting and informative for the technically minded.

We then move on to the Amiga and how it works and handles graphics discussing bit planes, interlace, overscan and other internal workings.

One thing should be borne in mind when reading this book, it is written for the USA and NTSC standards are the norm throughout the text. This doesn't matter that much as long as you are aware of it and make allowances, the principles are the same.

Hardware

Next, it takes you into the studio with a brief discussion of the hardware requirements of your Amiga and on to the world of Video Recorders. The various tape formats are covered here from VHS to M-II and Betacam fairly briefly before considering how to choose the right VCR for your needs. This is followed by a dissertation on the various camera types and operating features including camcorders and the things you should look for.

Of necessity these subjects are covered only briefly because there are many topics to cover in this book each probably being worth a book in their own right if the subject is covered in depth. Generally though this book gives enough framework for you to make a considered decision on which avenue to pursue.

Following a quick look at monitors and your needs we then move on to the real heart of editing. Surprisingly Edit Controllers, Single Frame Controllers, Character Generators, Special Effects Devices and Processing Amplifiers etc. are dealt with in two pages. In most editing suites these items make or break you as there is nothing worse than a bad splice. You can have the greatest Amiga in the world and fantastic software but if you don't put it together properly it looks distinctly like a backyard production.

Peripherals and Software

From this point on this becomes an Amiga book looking at Amiga specific hardware (Composite and RGB Encoders, Genlocks, Frame Grabbers and Digitizers) and software. I can only assume at this point that the author takes for granted that we are familiar with paint, titling, slideshow, animation, production and image processing programs to say nothing of the above hardware as these all flip by in eight pages with half of these pictures.

Never mind, if we have got this far we probably know our way around the above items and if we don't we can soon learn or know someone who does.

Well, onward to studio requirements from a very basic setup to a fairly substantial layout but still seeming to dodge time coding and sync signals. The importance of signal to noise ratios, good cabling and connectors exposes the wide range of connectors and electrical noise problems we may encounter but doesn't really tell us how to fix them.

Production

Finally we get to the meat of the subject and look at production. It follows the production of a video on "Introducing RxScan" through from the Pre-Production concept to scripting, storyboard, animatics (incorporating sound and motion), shooting schedule, budgeting, pre-production wrap and, at last, production.

In production we look at how to prepare and format your working tapes and the things which make the difference between an amateur roughie and a smooth professional job.

From here on we spend time looking at camera techniques, composition, angles. types of shots (long, medium and short), camera moves (dolly, zoom, pan, tiltetc.), the use of multiple cameras and lighting. Some tips are given on how to look good on video i.e. clothing, body language and speech.

About half way through the book we strike DTV Post-Production and move

into high gear. Firstly we look at genlocks with some discussion over the range currently available with SuperGen being chosen as the unit to be concentrated on. Digi-View is covered in some detail as a source of still video which can be modified in a paint program.

Editing

Punch and Crunch (Assemble) and Insert Editing are next and the tricks of how to do them to achieve maximum visual and audio impact. This looks at transitions and DVEs. Graphic design, composition, aspect ratio, pixelisation, split screens, the importance of colour and all those things that go together to make a scene look good are discussed with suggestions on techniques you can use.

Editing of course is not just splicing (is that the right word) and joining shots. It also concerns titling, credits, animations, special effects etc. and for

these we turn to the Amiga software. In particular this book spends quite a time looking at DPaint III, Video Titler, Butcher, PageFlipper, Animator, Moviesetter, DeLuxe Productions, Turbo Silver and Sculpt 3/4D. Most attention though is given to DPaint and its versatility in many areas. A short mention is also given to single frame recording of animations.

To round off the subject Chapter eight deals with sound right from microphones to tape recorders, mixers and MIDIs. It deals with MIDI software, mixing, layering and sweetening of sound, matching sound and music and scoring animations.

Last but not least Chapter Nine deals solely with the needs and cost of producing broadcast quality videos. Oh, and almost as an afterthought, we find a chapter devoted to Video Toaster which is probably not much use to us here in Australia as it only operates in NTSC mode.

Two useful Appendixes are provided, one gives a list of resources (books, software and hardware) and the addresses and phone numbers and the other includes a Glossary of video terms for the uninitiated.

Conclusion

This book is a worth while acquisition for the beginner who can learn much from it. For those who have dabbled but don't consider themselves experts they will probably find many useful bits of information that cam improve performance but this book is not for those who wish to become instant experts. To get the best out of this book you will need to experiment and use your imagination. Remember good videos are created in the mind and imagination - the computers and cameras are only the tools.

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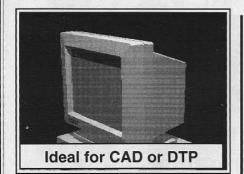
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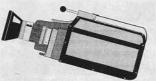
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A big thank you to Mark Tyler at CBM for the footy tickets. Great Night! Don't forget about the State of Origin!

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AMOS Column

Writing a Game - Part 2

by Wayne Johnson

f all went according to plan last month, you should have half a game up and working. This time around we will be finishing off by adding five alien attack waves to our game, collision detection, plus a few housekeeping routines.

Let's get straight into it by booting up AMOS and loading our game into the editor. Select LOAD OTHER and load the Amal Editor. Click on EDIT OTHER and select the AMAL EDITOR so we can alter our AMAL code.

Run the editor and load in our sprite file (Sprite.abk for those who kept their files. Those that didn't can save the individual banks out of the game to disk). Next, load in our AMAL file. Press F1 for a quick check that all is ok before we add attack patterns. Click on 03 and enter the following (except the

comments):

A:

; Set Starting Marker Let X=280;

; Set X starting pos to 280 Let Y=30;

; Set Y starting pos to 30 pt. 1

;

; Send Sprite to move with pattern 1 Move 0,0,0;

; Initialise play buffer Jump A;

; Return back to start.

This channel routine simply places a sprite at the top middle of the screen and sends it along a path defined by you.

Next, press F3 to enter the Play Editor. Record a path in pattern 1. That takes care of our alien attack movement.

Unfortunately, we still need to define four more channels, one for each alien. This is necessary because we will be making a slight change in each channel.

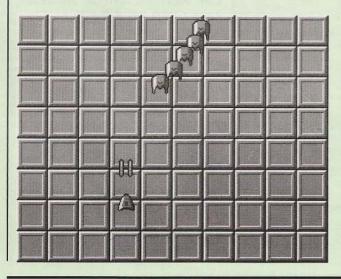
Take the cursor to the very first character in channel 03 ("A"), and press F6 to define the start of a text block. Move down to the end of the very last character and press F7. This should highlight the entire block you just keyed in. Press F9 and the block will be cut out of the page to the buffer.

We still need to keep the block in channel 03, so press F10 to place it down again. We now have a copy of 03 in the buffer. Go to Channel 04 by clicking on the 04 icon or alternatively by holding the Left Amiga key and pressing the right arrow. Press F10 to place a second copy of channel 03's program into channel 04. Repeat this three more times until we have the same code in channels 03 to 07.

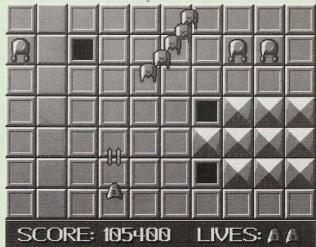
If the five channels were to stay the same way, we could easily run all five alien sprites of the one channel. However, we need to place a delay loop at the beginning of each channel to slow each sprite in turn to create a snake pattern to the attack wave. Go to channel 04 and enter the following before the "A:".

For R2=1 To 10; Next R2

The finished program up and running



And with a little imagination, this is what it could easily become.



Do the same to channel 05 but use a slightly larger delay.

For R2=1 To 20; Next R2;

For channel 06, make the delay a value of 30 and for channel 07, make the delay 40. Return to the environment channel (EE), and make the following changes so that we can test the alien wave ... (the indented code is our original; add the lines at the left hand side).

Hide Unpack 6 To 0 Sprite 0,288,200,1 Sprite 1,0,0,4 Sprite 3,0,0,3 Sprite 4,0,0,3 Sprite 5,0,0,3 Sprite 6,0,0,3 Sprite 7,0,0,3 Channel To Screen Offset 0,0 Channel To Sprite 1,0 Channel To Sprite 2,1 Channel 3 To Sprite 3,2 Channel 4 To Sprite 4,3 Channel 5 To Sprite 5,4 Channel 6 To Sprite 6,5

Press F1 to test our snakey alien attack wave. Alter the delay values to fine tune the look of your wave.

Channel 7 To Sprite 7,6

You may have noticed that channel 03 does not have a delay loop at the beginning of its routine. This is obviously because it is unnecessary to delay the leading alien sprite.

Our alien routine works, but we have to load it into AMOS and change the main code to suit the alien routines.

Save the AMAL code to disk and load it into our game from Direct Mode. Go to the editor and make the following changes to the program. The lines starting on the left are additions/changes to last month's code.

Hide: Make Mask Unpack 6 To 0 Sprite 0,288,200,1 Sprite 1,500,500,4 Sprite 2,0,0,3

```
Sprite 3,0,0,3
Sprite 4,0,0,3
Sprite 5,0,0,3
Sprite 6,0,0,3
Channel 0 To Screen Offset 0
Channel 1 To Sprite 0
Channel 2 To Sprite 1
Channel 3 To Sprite 2
Channel 4 To Sprite 3
Channel 5 To Sprite 4
Channel 6 To Sprite 5
Channel 7 To Sprite 6
For A=0 To 7
: Amal A, A
: Next A
Amal On
Do
Loop
```

Press F1 to view our game with working ship and bullet movements and the addition of a simple attack wave.

Now let's add a little collision magic. Notice how everything is still running 100% under AMAL? We have AMOS running an eternal Do: Loop forever while AMAL goes about its business. So we'll give AMOS the job of looking out for collisions. It's always a good idea to program like this; giving as many tasks to AMAL first, then getting AMOS to only look after quick little routines (as we have discussed before). This obviously can't always be the case, but for some applications it works well.

So between our Do and Loop commands, let's add the following code (the indented lines here continue from the last line).

Do If Sprite Col(0,1 To 6) =-

```
1
Then Bell
: Amal Off
: For A=1 To 20
: Sprite 0,,,2
: Wait Vbl
: Sprite 0,,,5
: Wait Vbl
: Next A
: Sprite Off 0
: Fade 3
: End For A=2 To 6
If Sprite Col(1,A To A)=-1
Then Sprite A,0,0,2
```

```
: Sprite 1,500,500,4
: Boom
: Wait 5
Next A
Loop
```

The first line checks for a collision between the player's ship and all other sprites. If it touches anything else, the ship will be destroyed (the bullet will not affect the ship because the AMAL code has been set up to start the bullet higher than the ship).

The second line checks for a collision between the bullet and any aliens. If one hits, then the sprite changes to the explosion image in the sprite bank for an instant before being placed offscreen. It is important, as I have done, to make sure that the bullet is placed offscreen at a totally different side of the screen to the aliens. This stops collisions happening offscreen.

So to answer the question, "how do you write a game", that's one way. I hope this two part series has helped a lot of you to think along the lines of making a game from scratch. From here you can build the game up to incorporate more attack patterns and a system to manage them, possibly open a smaller screen at the bottom of the play area to display scores and logos, or even create intros, game over screens and levels.

News

- Latest version for AMOS is now 1.34. Available from the Australian Amos Club on disk BA-36 for Club members.
- Another commercial product written completely in AMOS is *World Series Cricket*. More titles are appearing on the market as people start to realise its potential as a serious development language.

Hints and Tips

• For users of the AMAL EDITOR (and we all should), here is a couple of tips that make it quicker and safer to use.

Firstly, if you have the compiler, it is a good idea to compile it to improve

screen refreshes and flipping between channels. A bigger advantage to compiling is due to the size of the EDITOR; when you run it, AMOS will not waste time testing it before running (a big plus when needing to go between the editor and AMOS often).

Secondly, it is a good idea to add the line, 'BREAK OFF' to the beginning of the EDITOR code. If you are used to using CTRL-c to break out of an AMOS program, then you are very likely to do the same from within the AMAL EDI-TOR. This not only means you exit from the editor itself, but you loose the code you have been working on. So to add BREAK OFF to the program and use ESC whenever you wish to exit the EDITOR, you will garrantee to code loss due to bad habits.

 A lot of people have trouble loading in their own screen created in Deluxe Paint. The reason is because AMOS is trying to configure the picture to suit the default screen of 320 x 200 and 16 colours. If your screen is longer wider or has more colours, AMOS will have trouble loading the screen in. The trick is to close the screen like so:

SCREEN CLOSE 0 LOAD IFF FSEL\$(""),0

• When you are doing a lot of small editing and checking to a program, it may become annoying to break from a program with CTRL-c, press space for the Editor Mode, and then have to place your cursor over the part you wish to change again.

This is easily solved by pressing ESC after breaking to bring up the blue Direct Mode bar and pressing ESC again to enter Editor Mode. This second method will not shift the text to where the program was broken, but rather return to where you last edited.

I think that will just about do this time around. Keep your eye out on the AMOS BBS. I will be releasing a demo version of an eight-way scrolling shootem-up in the very near future on the Predators BBS, called AMOBIX. It will contain full source, GFX and Music so you can pick it to pieces.

Just a quick note for Amos Club members with modems. Predators BBS will be starting a new format for its AMOS BBS section. There will be access for regular AMOS users as well as a new area for Club members only. This will be an exclusive area that will contain files from the Australian PD collection as well as news and tips. If you want further information, contact Mig on the Predators BBS on (02) 604 6644.

Next month, we might try something a little different ...

Happy Amosing.

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You Can CanDo

Part 2

by Greg Abernethy

Work Bench Control Panel

One of the most useful utilities I have designed using CanDo is a Workbench Control Panel. The Control Panel has a series of buttons, with the names of my most used programs on them. I found that, having a hard drive, I was continually opening my hard drive disk icon, and searching for the drawers and icons for my favourite programs.

It was becoming tedious as it can take three or four seconds for the Amiga to display all the icons when the window opens, After designing the Panel, I placed it in the C: directory of my hard drive, and added two lines to my startup-sequence to load the Control Panel after the Amiga had booted up. Then it is simply a matter of clicking on the button for the program I want to use, and I'm up and running. I left the deck unbound to save space, as it is less than two kilobytes in size.

The Control Panel can be designed in about ten minutes. For those people using floppy drive systems, the setup is the same.

Step 1

First create a window with the following specifications;

Dimension

x = 0 : y = 10

Width = 140: Height = 130

(this window size allowed me to have five buttons displayed. You may need to adjust the window size depending on the number of buttons you use.)

Objects

Close Gadget: Window Movement Gadget: Drag Bar

Options

Set the window option to "TRY TO OPEN THE WINDOW ON WORK-BENCH"

Step 2

Once the window is created you should see a blank window situated in the top left corner of your Workbench screen. If you wish to place it elsewhere, select "BROWSE" and drag the window around to see where it looks the best.

It would be a good idea to save your work at this stage. Save it to your C: directory with a suitable name. I have found that CanDo sometimes has problems when saving the window location, and that the next time it is loaded the window will appear in an old location. Reload the deck to ensure that the positioning of the window is to your satisfaction.

Step 3

Now it's time to add the buttons for the programs you want to run. Determine which programs you want on the panel. Creating a button is straightforward.

Click on "ADD" and then click on the "BUTTON" icon. Select a location near the top of your window, and draw your button. Don't worry too much about the size of the button, as you will need to centre it after adding text to the button.

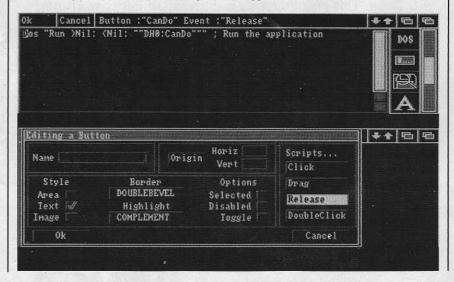
After the "Editing a Button" panel appears, enter a descriptive name for your button. Click on "Text" and enter the name of the program to run in the "Text" field. I have found that placing a space before and after the text makes a better display in the button. Select the font style, type and colour you wish to use and then select "OK".

Now adjust the button's location until it is centred in the window.

Step 4

Now it's time to write the script for this button. Click on "Release" in the "Scripts.." area. When the editor appears, locate the "Dos" icon in the slider panel to the right of the Editor. Click on this icon to load the "Dos" requester. Select the location and name of the program to be loaded by this button. e.g. Select "Newshell" in the C: directory to

Attaching a script to our application button



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have a Shell window opened when this button is clicked on. Select "O.K." and a script will be written for you in the Editor. The script should read something similar to this;

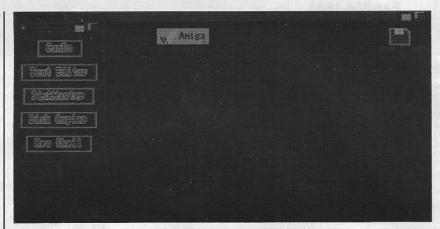
Dos "Run >NIL: <NIL: ""Workbench:c/NewShell"""

Click on "OK" again to return to the "Editing a button" panel. Then select "OK" again to return to the Main Panel.

Your window should now have a button displayed, with the name of your application displayed on the button. Save your work, and then select "BROWSE" mode to test if the program will run. If everything is working your program should load correctly.

I have experienced problems with programs that require special instructions, such as Professional Page, but most utility programs run correctly. It is now simply a matter of repeating the above procedure to create the other buttons for your control panel. Remember to use the "Duplicate" function in the "Button Editor" if you want your buttons to have the same features. Edit the name, location and script for each but-

After all buttons have been created, edit your startup-sequence to include these lines before the ENDCLI command and after the LOADWB command;



The finished CanDo application launcher

LoadWB cd C:

run >NIL: <NIL: DeckRunner "(your decks name)" EndCLI.

Make sure that DeckRunner is located in your C: directory, before testing the Control Panel. To test, reboot your Amiga and the Control Panel should appear on the Workbench after the CLI window has cleared. Click on whichever program you want to load, and you're ready to begin work. No more searching for icons in the Workbench window!

Next month we will design a straightforward TextFile viewer that will allow you to print the file once it is loaded into the viewer. This project will be an introduction to a major project, a Text Editor. Some of the features of the Text Editor will include:

- Load, edit and save files
- Print Files
- Search, Search and Replace (NEXT) or GLOBAL)
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Also during this time, I will include some handy hints and tips on using CanDo successfully. Meanwhile, have fun with the Control Panel.

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Education Column

by Stan Nirenburg

The Story Puzzle Book

his month I would like to review what I consider to be one of the better examples of educational software. The program is called *The Story Puzzle Book* and has been designed for children in the age group of three to eight years. It is published by First Byte (a company that makes other good educational programs, including *Dinosaur Discovery Kit*) and is distributed in Australia by Dataflow. It retails for about \$55.

The program comes in a large yellow box to ensure that Junior does not miss it on the shelves of the computer store. Inside, there is one disk that is not copy protected, a small manual and an information card. The program will operate on the Amiga 500, 1000 or 2000 under KickStart 1.2 or 1.3 and at least 512K of RAM. It may be run from a floppy disk or installed onto a hard disk.

If working from a floppy disk, the manual recommends making a backup copy. The supplied disk comes with the generic printer driver installed, which means that another printer driver from the WorkBench disk may have to be copied onto the program disk to operate your specific printer. Instructions for making a backup of the program disk and the installation of a printer driver are provided on the information card.

Installing the program onto a hard disk can be done from WorkBench and simply requires dragging drawers from the program disk onto the hard disk. The procedure is fully explained in the in-

struction card. When working from hard disk, the existing preferences printer driver is used. Although the program works well from WorkBench, I noticed that after exiting, it does not de-allocate memory. This is a nuisance because it means the computer has to be rebooted to reclaim memory to allow other work to be carried out.

Activities

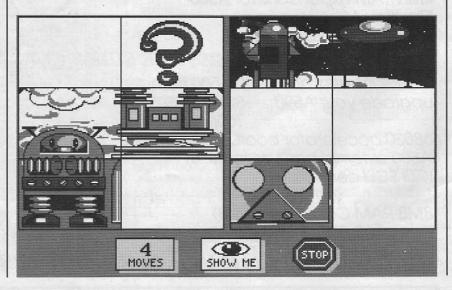
The program comprises three activities that are well suited to its targeted age group. These activities include creating a picture, solving a puzzle and writing a story. The main skills taught are reasoning and writing and, to a lesser extent, reading.

All sections of the game are introduced by Zug, the talking Megasaur. Zug is always on hand to give instructions and help as required, using a synthesized, robotic voice. The use of speech is a great feature of the program that will amuse the children no end, particularly when they hear their name spoken.

Picture

The simplest activity provided is creating pictures. I found our four year old mastered this activity with little instruction from me and can now operate it on his own. The child is presented with a choice of nine backgrounds for his picture. He is then instructed to add a friend, something that moves and a building from the selection provided. There are nine choices in each category, so the number of pictures that can be created is very large (about 6,500 combinations).

Once a picture is completed, it may be saved into a picture library or it may be printed. Being able to print the picture will give the children a buzz and they will be able to show it to their parents or friends. A colour printer, for those that can afford one, is ideal for this program because the output from a black and white printer does not look particularly good. Note that an impact printer can be noisy and slow and therefore it may be wise to engage your youngster in a different (non computing) activity whilst the picture is being printed.

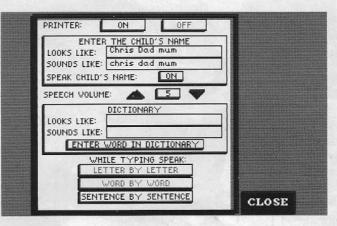


Puzzle

Two types of puzzle games with two levels of difficulty are available. After Zug gives your child the choice of using a picture from the library or of creating a new picture, he asks whether the child wants to do a shape puzzle or a tile puzzle.

The shape puzzle requires that a shape in the picture be matched with one of six predetermined shapes. The

available shapes include a circle, an oval, a triangle, a parallelogram, a rectangle and a square. If the correct match is made, the shape in the picture is filled in with a colour; the fill colour may be changed by the user. In the easy mode of play, Zug assists by telling the child what shape should have been picked. If a mistake is made, then Zug explains



what shape has been chosen and what shape is required. In the difficult level, Zug does not prompt for the shape unless a mistake is made.

One problem that I encountered (one that occurs with all games that are written for the American NTSC system) is that of picture distortion. Because the image is displayed in only 4/5ths of the

screen, circles look like ovals and squares look like rectangles. I found that I made a number of mistakes when matching these shapes. Luckily, another game that I purchased recently had a utility that allows the image to fill the whole screen. The result, of course, is no more distortion. I have seen similar utilities available in the public domain.

The tile puzzle is a sort of jigsaw puzzle that divides

the picture into six or nine tiles (depending on difficulty level) that are then mixed up. The child must reassemble the picture in the least number of moves (although there is no time limit or limit on the number of moves imposed by the program itself). If the child gets stuck, he can ask Zug to show him the picture correctly assembled before continuing.

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The puzzle segment can be performed by very young children with minimal or no supervision after brief instructions.

Story

This part of the program allows the child to write a story based on one of the pictures that had been previously created. It is the most difficult activity and is best suited to older children. However, even younger children can participate with the help of an older sibling or parent. My approach with our four year old has been to allow him to recite the story to me (with some prompting) whilst I did the typing.

The package can be set up to speak the letter, word or sentence that is being typed, thus providing feedback while the story is being created. After the story is finished, Zug can be asked to read it.

The computer can also print the picture and the story. The text is printed in very large characters (about 15mm high) making it easy to read. If one had a colour printer, the printout would be quite suitable for hanging up for display.

Parental Guidance

As has already been mentioned, the software can be adjusted by the parents to suit their own requirements. In the top right hand corner of the main menu screen, there is a little button labeled H (for help, I suppose). This serves two purposes.

The first is to provide brief instructions on using the program, meaning that once read, the manual does not have to be referred to again.

The second purpose is to allow the program to be customised. The Helper Control Panel allows the user to enable or disable the printer, type in the child's name and adjust the pronunciation and most importantly, it allows the parent to adjust the pronunciation of any words that might be used in the Story part of the program. This last feature means that Zug can sound like an Australian robot rather than an American. In addition, the program can be made to read the story as it is being typed letter by letter, word by word or sentence by sentence.



Summary

This package is one that I believe should be on most people's "must own" list with children in the age range from three to about six or seven years of age. The program is easy to use and can be learned with very little coaching from the parents. All activities (except writing the story) make use of the mouse alone to point and select objects. It provides three entertaining activities designed to exercise reasoning and writing skills. It certainly succeeds in teaching these skills through a mixture of

positive feedback, good quality graphics and use of speech to encourage the child. The activities themselves are interesting enough to ensure that children will participate in the game.

Feedback Needed!

To make this column as useful as possible to you, our readers, we need your feedback. Please write in with any comments, ideas or questions to me care of this magazine or directly to:

PO Box 136, Forest Hill, Victoria, 3131.



Sor Beginners Andy'S Allic

by Andrew Leniart

elcome back to Andy's Attic. The mail box has been chock full of late so more answers to your queries this issue along with a couple of miscellaneous hints and tips from yours truly.

Before we fly right into it, I'd just like to reaffirm the offer to ShareWare and PD authors that I made last issue.

Programmers Look Here!

If you are a PD or ShareWare programmer and feel you have written a useful utility, game or whatever, think about writing in and giving us a bit of a run down on what you have created. If we consider it to be of use to a lot of our readers, I'll do a short review on it via this column and give it some free publicity. If your software is shareware, details of how people can register this software with you will be included so be sure to have this information available in the doc file.

Most of the material we see for the Amiga is programmed overseas and I only come across the odd bits and pieces coded by Australian authors. I'm sure we have plenty of local talent just waiting to be discovered so let's hear from you.

Send a disk with your creation on it

to: Andy's Attic, P.O. Box 1335, Hoppers Crossing Vic 3029. I can't guarantee I'll cover all software sent in, however as long as you include a SSAE, I will ensure that all disks are returned promptly. Give it some thought.

Letters

Menus, Viruses and Using Alias

Dear Andy, thanks for a very helpful column. I would like some information on compiling your own disks. In transferring files and small programs across to another disk, I find that the print option that previously existed disappears. I realize that I must also copy across a "printfiles" command and printer preferences from workbench, but what else is needed?

Could you cover such things as the creation of menus at some stage? I use a handy little program called "MenuMaster" at present, but I'd like to know how to put them together myself. Perhaps an article on the creation of self-booting disks would be of interest to your readers generally.

How can I lock up my hard drive so that when I use a virus checker and insert "foreign bodies" into the floppy drive, I can be sure that some infected disk isn't writing to the hard drive while it's being checked? I've held off buying a commercial virus checker until I sort this question out. Can you recommend a program?

Finally, is it possible to "assign" or "alias" to reduce a command like "Ed s/ startup-sequence" to something simpler like "es"?

Ian Smith Brooms Head

AL: The problem of your own created disk not being able to print is likely due to a missing printer driver. In the Workbench sub directory "devs" there is another sub directory called "printers". It's in here that printer drivers live. To fix your problem, create a sub directory in your disks "devs" directory called "Printers" and copy the printer driver from your workbench disk over to this directory. Make sure you then select this driver via preferences on your own disk. (You'll also need the printer.device file in your devs directory - Ed.)

Once that's done and all is set up to your liking, the Preferences program is no longer needed and may be deleted to make room for other programs.

Everything selected via Preferences is saved to a file named "System-Configuration" in the devs directory. This file is always 232 bytes in size. The preferences program only serves to manipulate the settings in that file.

In regards to your worries of "locking your hard drive" when checking disks for viruses, I can assure you that your concerns are unfounded. For a virus to become active and do its stuff, the program or file that it is attached to must either be run or executed. Once an infected program is run, the virus loads itself into memory and is then capable of infecting files on other disks or hard drives.

When a virus checking program is scanning a disk for "Link Virus" it searches through the files looking for things that the anti-virus software has been programmed to look for. It will not activate a virus though, nor will it find it if the anti virus software you are using does not yet know about it.

If it finds a virus, it will tell you about

it and usually give you the option of deleting the offending file then and there.

I'm glad that you have held off buying a commercial virus checker because in my experience, a lot of the commercial efforts are a waste of money. Most are totally out of date by the time they hit computer store shelves as new strains of viruses are consistently being released by those that have brains in places other than their heads. Public domain or Shareware efforts on the other hand are usually written by Amiga enthusiasts and spread like wildfire via bulletin boards and user groups. Most are consistently updated and the updates normally come free of charge.

For the same reason, to recommend a certain virus checking program is difficult, because there are new ones constantly being released. If I had to recommend "one particular program" for you, then it would have to be NoVirus by Nic Wilson. Not because I think it's far better than any of the others, but because it's an Australian product that has been around for years and updates via brainfiles the program uses are released frequently and freely. Support is also excellent with the author making himself available to be contacted either by phone or mail. No Virus is Public Domain and can be obtained through any reputable PD outlet.

There is also a commercial version of *NoVirus* that works exactly the same way as the PD one does when looking for viruses, however it has a bundle of nice extras enabled in the way of saying thanks for buying the commercial package. Give Nic Wilson a call on (076) 35 8384 BH and have a chat. You'll find him a most helpful fellow.

As for shortening the "Ed s/startup-sequence" to "es", yes it's possible and easy as long as you are booting up with a 1.3 Workbench. Edit the file "Shell-Startup" located in your boot disk's S directory and include the following line in this file. "Alias ES Ed s:startup-sequence" Save the file, fire up a shell and try it.

Your idea for an article devoted to compiling your own self booting disks is a good one. Look for it in future issues of ACAR or PAM.

Iconising Ed Startup-Sequence

Dear Andrew, I have become the proud owner of an Amiga 500 with 1mb ram, two floppies, obtained secondhand. Going through the back issues of ACAR, I decided to have a go at the tutorial in Part 10 to edit the startup-sequence. I found ED so I am using it instead of Icon Y

My resulting files will run or execute correctly from the CLI shell, but when double clicking on the Icon "pinched from a notepad file", I get a requester telling me "Software error - task held, finish all disk activity, select cancel to retry/debug". Retry returns the requester to me and Cancel wakes the GURU every time. I have used the following commands in the default tool requester..Df0:c/EdDf0:c/Ed:c/Edetc.. without being able to leave the Guru alone. I have not changed anything in the tool types. There are entries for FILETYPE=notepadltext, WINDOW and FONT. Is the default tool case sensitive? I am using the file name Ed-Startup (+.info) in the root directory for my purposes. What else can I do?

I don't have any problem using the Cli window, but I do like to see something work successfully once I starton it.

Your tutorial series has been easily understood, allowing me to get an immediate start on the Amiga, but I have to use IBMs at work and have been using a C64 for the past seven years here.

Please pass on to ACAR my appreciation for the best Commodore magazine. I don't get any others. Has there been a series on Arexx, or is there one coming up?

> Dave Brown Lithgow

AL: Your problems with Guru rearing his head stems from the fact that you have not edited the Icons default values correctly. That's what happens when you skip steps when trying out the examples in these pages. Go through the following steps and your problems should be solved.

1. From workbench, click on your Ed-Startupicon once with the left mouse

button.

- 2. Now select the "Info" from the Workbench pull down menus. A screen pops up showing the icon's default.
- 3. Click once with your left mouse button in the "Default Tool" box.
- 4. Delete everything you have in there or just press "Right Amiga-X" to erase the whole line.
- 5. Now type in DF0:C/IconX and hit return
- Click on the "Save" gadget at the bottom left of the Icon default editor to save your changes.

Once you've done that, everything should work. If it doesn't, check to make sure you have a copy of IconX in your disk's "C" directory. If you don't, make a fresh copy of your 1.3 workbench disk from the original.

Note that IconX, unlike Ed, is not an editor. What it does is give you the means to execute a script file (normally done in a shell or cli) from workbench.

An important point you missed in the Part 10 issue is the fact that the icon you have created must have an associated text file which will tell IconX what it is you want to execute. Create a text file with Ed that contains the following line: Ed Df0:s/Startup-sequence.

Save this file in your case with the filename "Ed-Startup" and place it in the root directory of your disk along with the Ed-Startup.info file which is your icon. Once that's done, when you double click on the Icon from workbench, IconX fires up, reads the contents of your text file and executes any commands within it. Let us know how you got on.

Finally, thank you for the kind remarks about the magazine. We think it's the best Commodore magazine available as well, and at the best price to boot. No false modesty here. <Grin>

A series on Arexx? Not as yet, but sounds like a good idea to me. How about it, Ed?

DIR Deletes on a Single Drive

Dear Andy, regarding your article in issue eight CLI tutorial part 13, I'm

having a small problem. I wanted to delete some files so I tried using the Dir? (I have a single drive). After entering Dir? I then switched disks when the command arguments came up and I entered "Opt I". The computer then asked for the Workbench disk and would only show files on this disk. I experimented but still no luck so I'm hoping you can help.

Gary Dodd Aberfoyle, SA

AL: Still with a single drive huh? Do yourself a favour and save up for that second drive, but in the meantime, the following should work for you.

"Dir Opt I < DiskName:>

So assuming that the disk you want to delete files from is called "Mydisk" then you would type.

Dir Opt I Mydisk:

and hit return. Be sure to put the: directly after the disk name. This tells the Amiga that you want to work with the disk called "Mydisk". A requester will then appear asking you to insert "Mydisk" after which you will be able to carry on as normal.

Now while the above example will work, it's doing things the hard way. You have another type of disk drive with your Amiga. The Ram: disk. You can use this to your advantage when working with other disks by copying frequently used commands over to RAM and using those when you have a disk other than workbench in the drive.

Assuming we want to use the following commands when exploring other disks. Dir, Execute, Type, Delete, Run, we would type the following in a shell or Cli.

Copy DF0:c/dir to Ram:

Copy DF0:c/Execute to Ram:

Copy DF0:c/Type to Ram:

and so on until we had all the commands we needed.

Once you've done that, all that is needed to get a directory listing of another disk in DFO: is to tell the Amiga we want it to use the Dir command in the Ram disk rather than the one on the workbench disk.

Precede the command with the path of the ram disk like so..

"Ram:Dir Df0:" or

"Ram:type Df0:Filename"

to type a text file to the cli.

You can even go further than this and set up a path so that you do not even need to specify Ram: each time you use a command or create a script file which will set up a ram disk for you every time you need to use one.

All of this has been covered in previous installments of my tutorial so dig out those old issues and have a gander through.

Drive and Disk

Dear Andy, I have an Amiga Starter Kit hooked up to a TV and have some questions.

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- 1. Can the heads of the internal drive be de-aligned? If so, how do you realign them?
- 2. Can you run high-density disks in the Amiga? If so, how do you format and back them up?
- 3. Can non-DOS games get viruses? If so, how do you get rid of them?

Hope you can help.

David Sanders Maryborough, QLD

AL: 1. Yes, the internal drive heads can get de-aligned after considerable use or if the Amiga gets a bad knock. Telltale signs of this are the Amy not being able to recognize a valid disk when inserted into the drive some times and not others. If this happens on a lot of your disks and quite frequently, then you should take the computer to a recognised Commodore repair agent and have him look at the drive. Special software is used to help re-align heads and should not be attempted by anyone that does not know exactly what they are doing.

- 2. You certainly can use high density disks in the Amiga just as you use double density disks and you format and back them up in exactly the same way. The drawback is that the disk will still only be able to hold the same amount of information as a double density disk. This is because of the type of disk drive which the Amiga uses. Therefore, the extra expense of buying high density disks is not worthwhile.
- 3. Yes, disks with Non Standard boot blocks certainly can be infected with viruses. Because they are prone to Boot Block type virus, usually, once a disk is infected, the game or whatever software is on the disk becomes useless as the disk can no longer load because the custom boot block has been destroyed.

To get rid of the virus, you need to overwrite the bootblock with a back up if you have one or make a fresh copy of the disk again. To protect your software investments, whenever possible, back up your purchase and use the copy of the disk while keeping the original tucked away somewhere safe.

If you can't make a backup of the disk and the software insists on the disk

being write enabled, then always turn the Amiga off for 10 seconds before booting up with your original. This will remove any virus from computer memory if one exists and will keep your disk safe.

A590 Power Up Glitch

Dear Andy, In regards to an article you wrote in the March issue of ACAR about the A590 problems. I am currently having the same problems. My Amiga 500 refuses to recognise the hard disk. I carried out your instructions and it did the trick. If I reboot the machine, the hard disk will autoboot without problems and everything seems fine, however if I turn the machine off and try to turn it back on again later, the Amiga won't recognize the hard disk again and I'm back to where I started again.

I don't know an awful lot about my Amiga so I'm hoping it might be something simple that I'm missing. Any help you could throw my way would be extremely helpful as I'm getting frustrated having a \$600 hard disk that at the moment seems just about useless. Thanks for your trouble.

Tony Finn Wagga Wagga, NSW

AL: I don't know what else to suggest Tony. My machine is well out of warranty so I got a techie mate to have a look at it for me. All he did was polish up the contact bus where the A590 connects and that seemed to ease the problem a fair bit, though it has since occurred again a couple of times.

If your machine and/or hard drive is still under warranty, then I would certainly return them both to be looked at where you purchased them. If they are both out of warranty, then unfortunately, you may need to invest in getting the machine checked out by your nearest ComCare centre. At least once they have a crack at it, then you should have some sort of warranty to fall back on if the problem recurs again. Let us know how you got on.

If any readers can shed some light on this mysterious little quirk with the A590, please write in.

Kindwords Problems

Dear Andy, Many thanks for a fine magazine and an interesting column. My problem concerns printers and print commands. I have been using KindWords for some time and quite candidly it has been quite a problem. I am experimenting with a PD word processor and combined with a spelling checker, am getting better results from it than I ever got from KindWords.

The problem that I am having is that I cannot get my printer to print bold, italics or underline. The printer is a Commodore MPS1230 and I use it for all my printing. On *KindWords*, the driver is set to EpsonXOLD and on my spreadsheet, the driver is Epson_JX80 and it behaves perfectly for those programs. I have tried every Epson printer driver on the Extras disk but to no avail.

The word processor I am experimenting with is *TextPlus V2.2E* which is behaving well in all respects not withstanding the directions which are written in rather quaint English at times. Looking forward to hearing from you soon.

Ewen Bogle Hamilton, VIC

AL: When you say that your printer performs perfectly with KindWords and your spreadsheet, I assume that you mean that it prints bold and italics with those programs? If that's the case then I would be looking at the software rather than the printer. It is unlikely that a change in printer drivers will cure your problem. I would guess that the software is not passing on the correct control codes to the printer and may have a slight bug in it. Certainly if TextPlus allows you to write in italics etc, then it should be able to pass this information to the printer.

Have you tried checking the *TextPlus* documents for a contact address to the author of the program? Most PD authors are very helpful and love feedback from people using their software. They rely on people writing to them and reporting problems so that they can improve their software.

Give that a try and see how you go.

Extended Icon Selection

A nifty but often overlooked little trick for workbench users is the ability to be able to work with more than one Icon at a time. There will be times when you may want to move, copy, delete or snapshot a number of icons at the same time.

Rather than doing your work one at a time, you can use the extended selection technique to save time. Let's say for argument's sake that you wanted to copy all the programs with icons from your Utilities drawer on your Workbench disk to another disk in drive DF1: You could do this by dragging each icon one by one until you got them all over there. But try this for size.

Hold down the SHIFT key and click once on each icon you want to work with. As long as you keep the shift key down, each icon will remain highlighted. Make sure that you keep your finger on the left mouse button when you get to the last icon you want. Letting go of the shift key now, drag the icon with the mouse to the other disk's window and presto, all the others follow.

You can also do a quick clean up of a disk's window by using this method and selecting Clean Up from the Workbench Special pull down menu. Or even delete a whole heap of programs by highlighting all of the icons you want to get rid of and selecting Discard from the workbench pull down menu. A quick and easy way to do multiple work with icons. Try it out.

Fixing that Pesky Rodent

Is your mouse skipping around the screen in a jerky fashion and generally misbehaving itself? If it is, the following might help. To keep your rodent in top working condition, you need to give him a bit of a clean every now and then. Grab yourself a pair of tweezers, bit of alcohol or tape cleaning fluid and a piece of lint free cloth. Armed with that gear, flip mickey on his back and slide off the ball cover by pulling the plastic cover in the

direction of the arrows. It's ok, mice don't get dizzy. Now holding one hand over the opening, turn the mouse right way up again and allow the ball to drop out into your hand. Put it to one side for the time being.

Upside down again and looking inside, you will see that there are three metal rollers. Wet a corner of your piece of cloth with the alcohol and gently rub the surface of each roller. If this is the first time you're doing this, then there will probably be a fair bit of gunk on them. Keep at it until you get all the lint stuck to the rollers off. Use the tweezers to help get the really stubborn bits loose, but GENTLY does it.

Once you've cleaned up the rollers, give the whole inside area a gentle wipe out with a dry part of the cloth and drop the ball back in there. Replace the cover and away you go.

If you own and use a mouse mat, (and if you don't, you should) give that a bit of a brush down at the same time. I use the old brush-o-matic on my mouse mat and it does a top job of collecting all the tiny bits of fluff and dust that collect on its surface.

Fire up the Amy and see how Mickey performs now! Just like a new one. Do this procedure periodically if your mouse starts to play up and you'll put a new breath of life into it every time.

Note that if you are finding your mouse drops icons occasionally or double clicks when you wanted to only click once, then there is a good chance that the button switches have worn a bit. Commodore-supplied mice unfortunately have cheap and nasty switches but these may be replaced quite inexpensively by third party manufactured ones. These are available at any reputable computer store like the Midi-Mouse Computers chain.

Installation is easy by following the included instructions and can be performed by just about anyone who has four thumbs like me. The beauty of it is that once you replace your switches with one of these kits, you'll probably never have another problem as they are much higher in quality. Be sure to buy the micro-switch type.

Amiga SOS Signals

Did you know that when you power the Amiga on, it goes through a set of routines and tests itself to make sure all's well? If it's not, it won't beep SOS at you, but it will give you an indication if you know what to look for. If you are having strange problems with your machine, then the following infomation may help to track down where to look.

During power up and reboot, the Amiga sends important information to the screen via colours. If everything checks out okay, then the following sequence of colours are sent to the screen.

Dark grey - initial hardware tested okay, the 68000 is running and all registers are readable. Light grey - the software is being loaded and all seems okay so far, White - all's well and correct.

If there are problems however, the Amiga will send other colours indicating what the problem may be. A Red flash means that an error was found in the ROMS. Green is an error in the chip ram while blue means there is a problem with one or more of the custom chips.

The keyboard is also tested by the Amiga during startup and problems are reported via blinking the Caps Lock light. One blink tells you the keyboard ROM check failed. Two blinks and the keyboard ram is screwing up. Three blinks means the watchdog timer failed while four blinks means a short between two row lines or special control keys.

Now, while the above information is pretty much useless to a layman like myself that does not "fully" understand the hardware side of the computer and know how to repair it, it can still be very useful to keep the reference for other reasons. It gives you an idea and starting point as to what to look for and will also give you an indication that something may be wrong, even if it's not immediately apparent. The knowledge certainly made life easier for me while talking to a Commodore technician over the phone once about my A500 reset problems.

That's it for another month from the nooks and crannies of Andy's Attic. Hope you've enjoyed this issue and got some value out of it. Till the next time ...



by Arthur Stevens

Letters

Into the mailbag first up, and the first letter comes all the way from the U.S. of A., from Steven E Eyrse of Gig Harbor Washington State. Steven has included a couple of disks of *Geos* shareware and samplers, and says "I'm off to Portland Oregon to work on a film and won't be in contact for about three months, but in the meantime hope some of the shareware included is of help."

Thanks Steve, yes indeed, there's some useful programs, and I'll be putting them out on a shareware disk soon.

AUTOCLOCK is helpful for those still running Geos v1.2 and v1.5, however v2.0 of course has the on-screen clock and isn't a problem.

ICONS is an icon editor with a difference. It operates with its own Geos Icon, but when double clicked switches back to the standard Commodore operating system to run, a good editor however and is clearer and easier to use than the GeoWorks Icon editor.

NEW SYSTEM ERROR is a real boon. There's nothing worse than a System Error in *Geos*. You get a dialogue box on screen with System Error at \$F3B7 (or whatever) and a total lock up of your computer. Nothing but a re-boot will resurrect Geos, and you lose your valuable files (particularly if you're using a RAM Pack, GeoRam 512 for example), but with New System Error a quick click on your mouse button restores and resets *Geos* to the Desktop.

C2.CALENDAR is a simple Calendar accessory which runs in tune with

the system clock, however it isn't as effective as the Calendar on the Deskpack plus disk.

HEXCALC is a useful utility for the advanced *GeoProgrammer*, call HEXCALC up from within *GeoProgrammer* and it'll convert Decimal to Hex or Vice Versa, display Binary values, etc.

DisBAM displays the BAM of the current disk.

BLACKOUT is an auto-execute program, which, once installed, Blacks out the screen out after 6 to 7 minutes of no keyboard activity (a great way to avoid burning in of your Desktop image).

BIG CLIPPER is a utility that takes GeoPaint users into a new dimension. How many times have you wished you could take a Photo Scrap larger than that allowed by GeoPaint? With Big Clipper, you're home and hosed.

INFOVIEW DA lets you view a file's header data - the "INFO" box and icon, within an application. All files, groups of files, or commonly used *Geos* file types can be searched for on up to three drives.

INFOBOX is a desktop utility (i.e. accessible from within other programs) which displays your current drive and printer status.

DISK USAGE is another accessory which can be accessed from the Geos menu. It displays the current disk drives (or RAMpack drive emulators) and the disk space used.

WRONG IS WRITE converts Write files amongst each other, for example, can convert a *GeoWrite 2.1* back to v1.1,

or v1.1 to v2.0, or to PETSCII or true ASCII, very handy if you like to use word processors like *Easy Script* or *Speedscript* and the material you receive arrives in *GeoWrite* format, or if you like to write in *GeoWrite* format and want to send your document over a modem to say a PC or Amiga, convert to true ASCII and send it.

GEOS/PC

Last month I introduced you to the Geos/PC Ensemble now released by GeoWorks as they walk away from the Commodore 64/128 systems that they've developed over the years. As I said last month, Geos/PC is a dream to use, for me it's a simpler option than the usual DOS environment, and personally, I still find it easier to use than Windows, especially as all the applications (other than Quattro/Pro) all operate in basically the same manner and design.

Again my thanks to Dick Smith Electronics for the loan of a Digitor 386SX-20 PC and Star LC24-10 Printer. I couldn't continue this review without DSE's support and assistance.

Focusing on *GeoWrite* for the PC, and comparing it with the C64 product, the first thing that becomes obvious is the operating speed. From double click on the icon to a "ready to go" screen takes a matter of about four seconds, compared with nine seconds on *Geos* v2.0 on the 64 with a 1541 drive, and a comparable five seconds on the 64 with GeoRam 512.

But that's where it all changes. *GeoWrite* PC has more facilities available via the drop down menus. Menu "File" for example has 11 options, NEW, OPEN, CLOSE, SAVE, SAVE AS..., REVERT, INSERTFROM TEXTFILE, SAVE AS TEXT FILE, PRINT, PAGE SETUP and EXIT, while the 64 boasts CLOSE, UPDATE, PREVIEW, RECOVER, RENAME, PRINT and QUIT.

Menu "Edit" includes the usual CUT, COPY and PASTE, along with STORE STYLE, RECALL STYLE, INSERT PAGE BREAK, INSERT PAGE NUMBER and CHECK SPELLING.

The "View" menu shows 25%, 50% and 75% reduction of the page avail-

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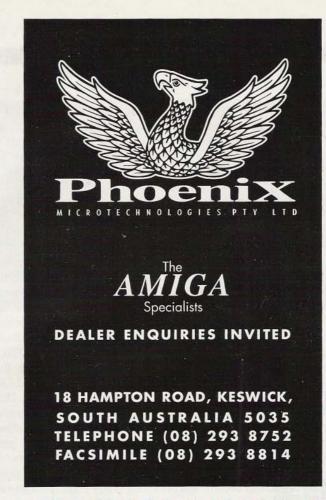
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Workbench 2.0

Full enhancement kit inc. ROMs

\$150 8Meg Boards for A10<mark>00's*</mark> OK - unpopulated

1 - Meg populated 2 - Meg populated

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Still waiting to see a few examples from the more creative of you. If you've written a GeoBasic program and converted it to an Application, send it to me c/- ACAR for review, and if you want to make a few honest bucks out of it, make sure you include your price and FULL documentation.

GEOS PD

Mypredecessor on this column, Owen James advises me that he still has the geosPD disk available. It contains 25 or so of the best utilities, applications, fonts and printer drivers around. For a copy, send a cheque or money order (made payable to Owen James) for \$6.00 c/- ACAR GEOS SUPPORT.

As I've mentioned in earlier editions, I run a full Geos support facility on the TALISMAN BBS just outside Melbourne. If you're a Commodore 64 or

128 user and you have a modem available, don't hesitate to contact the Board. The telephone number is (059)-44-4061 24 hours per day. You can log on as a visitor and browse the Geos Support board. It's a World-Net Sub Board and there's a lot of information coming in daily from our networked friends in the USA, Canada, France, England and of course from right around Oz. I have full Electronic Mail facilities on board and my Handle is ARTIE (who would've guessed).

So that's it for another month. Keep your GeoPublished magazines and newsletters coming in (We'd REALLY like to see them), if you're a dab hand with a mouse and you're designing your own Geos graphics, let's see them for a review, and don't forget the address: The Geos Column, c/- ACAR, P.O. Box 288, Gladesville, NSW 2111 (and include a stamped self-addressed envelope if you'd like a reply).

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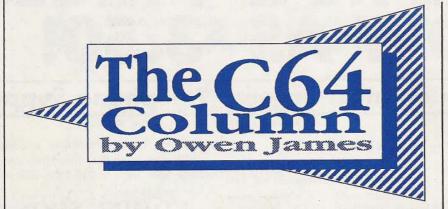
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News

C64 users wishing to purchase some of the great hardware and software products from overseas will be pleased to know there is now an alternative to the currency exchange difficulties and the long waits. Terry Chadban is now importing products from CMD, "Those Designers", Comm-Plex Software, and several Public Domain suppliers in the United States.

Currently available are RamLink models with optional battery backup, 16 disks filled with GEOS graphics prepared by commercial artists, *GeoWizard*, and several GEOS font collections. For information on the latest prices and products, contact Terry Chadban on (049) 602 082 or write to him at PO Box 237, Mayfield, NSW 2304.

Wollongong C64 User Group has been in contact with me to let me know they are still going strong. If you live in the Wollongong area and would like some more information you can contact Mr Jeff Gale on (042) 715 098.

Club-64 BBS, the official Bulletin Board of The C64/128 Game Club, now has a new number. From now on the number to call is (07) 341 9560 and it operates on a 24 hour basis from Thursday through to Sunday.

Thanks to the following people for this month's news contributions: Terry Arnold, Terry Chadban, Scott Logan and Steve Elwood. If you've got something the rest of us should know about, send it in to: The C64 Column, PO Box 288, Gladesville 2111 or NetMail me at 3:713/810.2C64.

PD Update

This month we begin our regular look at Public Domain software. Nearly all of the software you'll see mentioned are available from Brunswick Publications. With each program I'll also list the disk they are available on. Disks are \$5.00 each and there are no postage charges or joining fees.

Patch: Brunswick. Disk: 17 - Utilities.

Patch is a very useful tool for editing software directly from disk. It goes much further than just a sector editor. Patch will read disk data into its buffer based on your track and sector co-ordinates. Once in the buffer, you can view and edit it before writing it back to disk. In editing mode, the buffer is displayed as Hex, decimal, ASCII and BASIC keyword equivalents, making it ideal for almost any type of program hacking.

Patch is written in BASIC, making it perfect for 'patching' your own routines into it. Add your own routine to scan the disk for certain BASIC keywords or Hex values. If you love tinkering with programs, you NEED this program.

Disk Search: Brunswick, Disk: 17 - Utilities

A perfect compliment to *Patch* is *Disk Search*. Give *Disk Search* a text string or Hex number and it will search the disk and reportall occurrences. Coupled with either *Patch* or a standard sector editor, you have the perfect combination for putting your own name on that 'too hard to get to' high score table! Many other uses.

Velveeta: Brunswick, Disk 101 - Word Processors

One of the many text utilities available in the public domain is *Velveeta*. *Velveeta* is a utility for converting text files into a more generic format. Upon being given a source file it will strip carriage returns while still retaining paragraphs, strip all special control characters which may only have relevance to one particular word processor, and will even strip extra spaces unless there is a need for them.

Velveeta will read almost any file type for conversion and always output the result as a SEQ file. Very useful if you use more than one type of word processor or upload text files to bulletin boards.

Public Domain Software supplied with thanks to Brunswick Publications, PO Box 458 Bondi Junction, NSW 2022 Telephone (02) 389 7139.

Next month we'll look at more C64
Public Domain software.

Mail

The mailbag seems to be bursting at the seams once again this month. I'll usually reply to questions through the column, unless it's urgent in which case you should include a stamped self-addressed envelope.

Glenn Thompson, Sysop of the Talisman BBS, writes:

"G'day Owen, seems there is a lot of hussle and bussle about the C64 not being supported any more. I for one would like to put that myth to bed for a well earned rest.

"I run the Talisman Bulletin Board Service, which has been growing now for well over two years. The BBS is totally dedicated to Commodore users, so much so that unless you own one, validation isn't granted. The BBS offers online colour graphics, 105 meg of downloads, online games, trivia booths, text files, and we even Netmail to other Commodore boards in the USA, Germany, England and France.

"Talisman runs on a C64, Image BBS software, Lt. Kernal Hard drive, and scanning all bauds to 2400 bps. Other than normal Telecom charges, the BBS

able, Normal size, and 125%, 150%, 175% and 200% enlargement. There's also an "Options" menu, along with Paragraph, which allows colour in certain paragraphs, special borders, and the ability to set Tabs differently for every paragraph, should you so desire.

Fonts provided with Geos/PC include URW Sans, URW Roman, URW Mono, Sather Gothic, Cranbrook, Cooperstown, Shattuck Avenue, URW Symbol PS and Superb. Sizes can be anywhere from 4 point to 792 point. Styles include Plain, Bold, Italic, Underline, Strike Thru, Superscript, Subscript and Text Colour.

From that point it's a simple case of type what you want, exactly the way you want it. Yes, *Geos* PC works basically the same as *Geos* v2.0, the short cuts are all there, except you use the CTRL key instead of the Commodore key, (e.g. CTRL-B sets Bold type, compared with Commodore-B on the 64) so it doesn't

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take long before the regular Geos user is fully at home.

I've spent time trying to learn WordStar and WordPerfect but really when it comes down to it, I want something simple, clear and driven by mouse andmenu. Embedded commands in some other word processors just leave me cold. And while I can't go past GeoWrite on the 64 (with GEORam 512 of course), I have to say that were I going the way of the PC on a permanent basis, then GeoWrite and the Geos/PC ensemble would have me captive.

Next month we'll take a glance at GeoDraw.

GEOBASIC

Okay back to the good old 64 and while the Basic 2.0 supplied with the 64 is a little limited, there hasn't really been a way to program within the *Geos* environment, other than *GeoProgrammer*.

GeoBasic is now doing the rounds in this country and is looking pretty good as an alternative. GeoBasic is fully supportive of the Geos environment, Drop Down Menus, Dialogue Boxes, etc. and uses the Hi-Res screen to Display the program.

I have to confess, I've only spent a very short time messing around with small *GeoBasic* programs and I probably haven't explored more than a fifth of the language's potential, but what I've seen works very well.

The edit screen operates much like the normal Commodore screen, however has a few extra features. They take the form of drop down menus at the top of the screen.

Geos has one in-built submenu - GeoBasic Info, which gives the version number of GeoBasic, the author's name and the copyright information.

Other submenus may be displayed, these are the desktop accessories you might have on the same disk, like calculator or notepad.

FILE - features submenus,

CLOSE - Close the current file or program,

UPDATE - saves the program as it currently stands, to disk,

RENAME - changes the file name,

PRINT - Print the GeoBasic program, and

QUIT (obvious)

EDIT - has two submenus,

LIST (lists the current file to screen) and

SPRCOL (for Sprite Colour Selection)

OPTIONS - RUN (as in Basic 2.0), RENUMBER (sets the number to increment the lines by within the file),

RESIZE (Changes the heap size for your program) and MAKE APPL (turns a *GeoBasic* program into an executable *Geos* file - once created, does not require *GeoBasic* on the same disk)

UTILITIES - includes MENU (activates the Drop Down Menu editor), DIALOG (enables you to construct your own Dialogue Boxes for use in your program), ICON (enables the Icon List

Editor - for your own Icons for use in your program), BITMAP (the Bitmap Editor enables you to design bitmaps for use with the Icon List Editor or the Dialogue Box Editor), and SPRITE (fully functional Sprite Editor).

There are many new commands available in *GeoBasic*, as well as many of the regular Basic 2.0 commands. Commands like BITMAP, BUTTON, CALL (for Machine Language subroutines), COLRECT (not an ointment, but a way of drawing a Colour Rectangle). There's DPOKE and DPEEK (as in many other languages DOKE and DEEK, effectively a double Poke or Peek), FRECT (Draws a framed rectangle) REPEA ... UNTIL and WHILE ... LOOP, as well as the usual FOR ... NEXT.

Sprites are handled by the Sprite Editor, and that includes sprite animation. It's very powerful and yes, it's fairly complex, but I have to say that once you've spent a couple of hours simply experimenting with it, things will fall into place very easily. The Drop Down Menus and Dialogue Boxes work like a dream from within GeoBasic, but there's one little item I still can't work out. If you use a FOR ... NEXT loop within a program, it runs fine. But if you MAKE APPL, Make an Application as a stand alone Geos Accessory, it seems to fail on the FOR ... NEXT routines, so I've tried WHILE ... LOOP instead and







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Hot Games 3 - ARCADE - Hate, Megaball (super break-out style game) Hot Games 4 - Galaxian, Pacman, Space Invaders and Asteroid look-a-likes

Hot Games 5 - Imperium, Mech Fight, SCombat

Hot Games 6 - Chute!, Defender, Pharoah's Curse, SkyFight, SpaceWar Hot Games 7 - Amiga Tanx, Cave Runner, X-Fire, Bally III, Llamatron, Obess-O-Matic

Hot Games 8 - Asteroids - The Original, Bug Blaster, Microbe, Poing, Revenge of the Mutant Camels, Ring War, Trix

Adventure 1 - Island of Nephoton, Rescue & Jungle, Zut Alors! and Treasure Island. Some text based.

Star Trek - Tobias Richter's Fabulous Two Disk Edition - with animation, sound-FX, point and click interface. The best by far!

Business and Home

Analyticalc - Power spreadsheet package

CAD - Five Programs: Speaker and Circuit Design, Landscape & Architectual

Database - Hyperbase, HyperDialer, DataEasy, Home Manager, bBaseII

Genealogy - A-Gene and Family History

Spreadsheets - SCalc, SPREAD, Analyticalc

Finance - BankN, Your Money, Budget and CheckBook

Text Editors - Az, UEdit, QED, DME + Text Editors Guide

Wordprocessing - Text Plus, AmigaFOX, Liner, SuperRetLab, GWPRint & Print Studio

Communications

NCOMM 2.0 - Latest release - AREXX/SCRIPTing/BBS and more!

Desktop Publishing

Fonts are suitable for PageStream 2.x or Professional Page 3.x. Will print to dot matrix or laser printer.

DTP Fonts 1 - Adobe Type 1, Ballet, Benjam, BlackForest, CartWright, Classic, Faustas, Flintstone, Horst, Judas, LeeCap

DTP Fonts 2 - Adobe Type 1, Manzanit, Miami, Muriel, Park Have, Pixie, Play Bill, Polo, Richard, Roost, Saint, Sanser, Shark, Style, Toulouse, UpperWestSide, Windsor, Zalesk

DTP Fonts 3 - Adobe Type 1, Crackling Fire, Orbit, SerachLight, Gothic Shadow, SteelPlate, Premium Thin, Smoke, Titoretto, Middleton, Psychadelic

DTP Fonts 4 - Adobe Type 1, AarCover, Draftsman, LiquidCrystal, Medusa, BirghtonBold, Fontier, Logger, Caveman, Hot Dog, LowerEastSide, Qubist

DTP Fonts 5 - Adobe Type 1, AliceInWonderLand, Dubiel, PigNoseTip, Cardiff, Rothman, DominoEffect, Elwood, Xochiquetcal Clip art is black and white IFF images suitable for any paint program or DTP package.

Clip Art 1 - Abtract, Holiday, People, Plants, Signs, Sports, Things

Clip Art 2 - Animals, Food, Ships, Crests, Famous Faces, Funny Folk, Helicopter, Holidays, Military, Movie Stars, People, Sports, Things, Vehicles Clip Art 3 - Animals, Computers, Dwellings, Fantasy, Food, Plants, People, HouseHold, Merryment, Business

Education

Education 1 - Elements, Draw Map, Rubik, Space Log, Gears

Education 2 - Gravity Well, Planets, Life Cycles, Orbit, Enigmas, ZPlot

Education 3 - Word Puzzle, Crossword, Word Game, A-Solve, POWER LOGO!

Chemistry - Create 3D models of different molecules

Emulation

Atari Emulator - German Only MS-DOS Emulator - Transformer -Original PC Speed, Require MS-DOS System, No Graphics! -

C64 Emulator - Run C64 Program, Interface C64 Peripherals (opt. interface available from U.S.A. Only)

Graphics and Animation

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is totally free. The telephone number is (059) 444 061 and if anyone would like to get into moderning but just don't know how to, then they can write to me at this address for help: Talisman BBS, Sysop Necromancer, PO Box 30, Upper Beaconsfield, VIC 3808.

"Western Australia users can enjoy the same support by contacting Pilbara Image BBS on (091) 852 754. 128 support is a speciality."

OJ: Thanks to Glenn for the information. There are some excellent C64 support BBSs around Australia, and in the coming months I'm hoping to look at some of them through The C64 Column.

Local C64 Product Sources?

Alan Robson, of Higgins ACT, writes: "Dear Owen, do you know of anyone in Australia who modifies the geoRAM expansion unit to increase the memory capacity? I know I can send to the U.S. for it, but I feel personally responsible for the blowout in our balance of payment figures after purchasing geoRAM, geoBASIC and numerous other vital bits and pieces from the States."

OJ: Shame on you Alan! Ifully intend to give Keating your address and advise that a hit squad be dispatched to your place immediately! Oh well, I don't think Keating was hoping for a C64-led recovery anyway!

Seriously though, at the time of writing I'm trying to get in contact with a U.S. manufacturer in an effort to obtain some RAM expansion upgrade kits for Australian readers. I'll let you know as soon as information comes to hand.

Plus4 Support

Russell Lewis, of Cammeray, writes: "Dear Owen, Like Robert Alyari (ACAR Feb 92), I own both a Commodore 64 and a Plus4. Also, I am a member of PLUG Australia and there is a good selection of Plus4 Public Domain software available from this group. For more information, Robert or indeed any other Plus4 users can write to me at PO Box 324, Cammeray 2062. I may be able to help with information on the

Plus4, as I have some reference material for this machine."

OJ: Thanks Russell, I'm sure your offer will be appreciated.

Amiga 300 and CD **Problems**

Travis Howell, of Aspendale VIC, writes:

"Dear Owen, There's a rumour circulating about an Amiga 300 with a stripped down keyboard and disk drive. On Beyond 2000 recently they said that Compact Discs would only last 10 years. Would this mean games on Compact Disk would eventually be useless?"

OJ: Good question. To be honest, I missed that report and so am unsure what they put down as the cause of the disc's limited lifespan.

I remember an article printed in Commodore Magazine a few years back concerning a subject known as "Laser Rot". Laser Rot was said to affect laser discs. The causes of laser rot were largely unknown, but oxidation of the aluminium which coats the acrylic resin within the laser disc seemed a likely culprit. Compact Discs seemed immune to this 'laser rot' because the aluminium is sealed within a protective cover, thus not allowing it to oxidize.

Also, it was believed that the polycarbonate resin from which CDs are stamped is far less susceptible to laser rot.

I didn't get to see the Beyond 2000 report, so if anyone would like to enlighten me you can drop me a line.

If you have software on CDs, or any medium, back it up. Ten years is a long time, especially where technology is concerned, so by the time your CD dies it's quite likely that not only your software will be out of date, Compact Disc technology might be as well!

Yes, the Amiga 300 looks like a "happening" thing. (There's also talk of other Amiga models, though I doubt these last four will get off the ground, and if they do you certainly won't be reading about them in this part of the magazine!

Anyway, the A300 is basically a cutdown A500 slapped into a C64-styled case. No numeric keypad and limited expansion potential will put it out of the market for most intending 'serious' users, but it could become the C64 replacement as a good entry-level computer. (Latest rumours indicate the 300 has been revamped and is now called the 300 Plus. Improved specifications include space for an internal AT Hard Drive, and all the A500 Plus specifications - Ed.)

Prices are expected to be somewhere under \$500, and I suspect could be as low as \$350 within 18 months. Well, as I see it, it blows any chance of a C65 being released right out of the water. I wonder if we'll see any kind of Power Up! promotions to get the massive base of existing C64 users to upgrade to this entry-level Amiga. Power Up! has been very successful in the U.S. to get existing Amiga owners up to the A3000, so don't be surprised if we see something similar to get C64 users up to the A300. Of course, at the time of writing nothing is totally definite.

Replacing Damaged Games

Andrew Symington, of Turramurra, writes:

"Dear Owen, Until recently I had an original copy of Mindscape's brilliant soccer simulation Superstar Soccer, which I bought from a retailer about four years ago. However, about two months ago, it malfunctioned and would not

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load anymore. Does any reader have an original copy that they would be willing to sell? Mindscape stopped production of it about three years ago. My address is 88b Warragal Road, Turramurra NSW 2074."

OJ: Hmmm, looks like this letter belongs in the brain-dead end of the magazine (the Entertainment section). Well, if anyone has a copy to sell contact Andrew direct.

Stop Criticising C64 Owners

John Buckingham, of Warrawong NSW, writes:

"Dear Owen, I think it is about time that your Editor stopped being critical of C64 users. Several times in editorials or replies to letters he has said that upgrading to an Amiga is the way we should all be heading. I can appreciate the fact that most advertisers (who after all are the lifeblood of a magazine) support the Amiga but as long as this magazine chooses to support the C64 in any way the Editor should be neutral in respect to whether we should be upgrading or not and he should show more impartiality in his replies and editorials."

OJ: I don't think Andrew Farrell is particularly 'critical' of C64 readers, but I do see your point. Obviously when people ask whether or not he considers they should upgrade, or buy an Amiga or a C64, he will say that the Amiga is where the future lies. But what he says is true. Thousands, if not millions, of dollars are being poured into new Amiga hardware and software each year. Amiga owners now total more than three million world-wide. It would be irresponsible of him to say that the C64 is keeping up with technology and still enjoying a high level of support. Though I hate to admit it, support is declining.

The view that I give people is - Don't upgrade just for the sake of upgrading. If you are satisfied that a C64 meets your requirements, don't upgrade.

As I've probably mentioned before, I'm the proud owner of two Amigas which get used constantly. I upgraded because I needed more power to cope with the type of work I do. I would have

loved to continue using a C64 exclusively, but I outgrew it. I still, however, believe that the C64 is one of the best home computers for the price available today.

C64 Newsletter

You may remember last month I printed a letter from Warren Naismith regarding the possible formation of a C64 Newsletter. Plans are already underway, but Warren still needs to hear from anyone interested in this project. If you'd like to become a contributer, have some ideas to offer, or would just like to show your support you can contact Warren at 9 Wadeson St, Cobram, Vic 3644. More news in the coming months.

Tips and Tricks

Those of you who have been enquiring will be pleased to know that Tips and Tricks is back. Whether or not it stays back depends on the input I get from you. Send me your tips and tricks to be published. All kinds of tips are welcome, and can include short programs, hints for getting the most out of productivity software, and even "How To" styled submissions. Get writing!

Key Beeper

Here's a short program from someone wishing only to be named as Cobra (can't you guys think up more original handles?).

10 REM KEY BEEPER
20 FOR L = 679 TO 763 : READ A
30 POKE L, A : B=B+A : NEXT
40 IF B \$\iff 10502\$ THEN PRINT
"DATA ERROR" : END
50 SYS 679
60 DATA 120, 169, 180, 141, 20, 3,

169, 2 70 DATA 141, 21, 3, 88, 96, 166,

197, 2, 28 80 DATA 251, 240, 49, 134, 251, 224, 64, 240

90 DATA 43, 169, 15, 141, 24, 212, 169, 0

100 DATA 141, 5, 212, 169, 240, 141, 5, 212

110 DATA 169, 28, 141, 1, 212, 169,

0, 141 120 DATA 0, 212, 169, 17, 171, 4, 212, 169, 0, 141 130 DATA 227, 32, 179, 238, 200,

208, 250, 169 140 DATA 16, 141, 4, 212, 76, 49, 234, 120

150 DATA 169, 49, 141, 20, 3, 169, 234, 141

160 DATA 21, 3, 88, 96, 141SYS 679 will start the beeping on every keypress. The sound can be changed by:

POKE 730, WAVEFORM; POKE 705, VOLUME; POKE 720, NOTE (HIGH); POKE 725, NOTE (LOW).

SYS 750 turns the beeper off.

Program Protect

This short routine is based on one that was published back in January 1991. The protection routine crashed when used with certain others. David Stacey has modified it to work with almost any other routine.

Your program can't use lines 0 or 1. For line 1 type:

1 POKE 808, 225: POKE 775, 200. Then use the auto-run routine from the October issue:

0 POKE 770, 131 : POKE 771, 164. And then save it.

: PRINT"[SHIFT+CLR/HOME]"

: POKE 770,113

: POKE 771,168

: POKE 43,0

: POKE 44,3

: POKE 157,0

: SAVE "filename",8

That's about it from me for this month. As always, I want to hear from you. Send in your tips, tricks, questions and suggestions to me at: The ACAR, PO Box 288, Gladesville 2111.

Also, just a quick reminder that geoPD, PD1 and The User Software Disk are all still available for \$6 each. All cheques/money orders should be made payable to Owen James. Watch out in the next month or two for geoPD Volume Two-Even better than the first!

See you all next month.

GDTV

by Phil Campbell

Got something to say about Commodore's fabulous multimedia marvel? Here's your chance. Send your questions and comments to CDTV Feedback, c/o Phil Campbell, PO Box 23 Maclean NSW 2463.

Using Spare Odds and Ends

Dear Phil, I have a VGA monochrome monitor (with a 15 pin plug) and an IBM compatible keyboard (5 pin DIN plug) at home. Would I be able to use these on my CDTV if I had appropriate cables, and if so where could I get them.

John Yiannis Bundoora Vic

Ed: As far as I know, you can't use your VGA monitor with a CDTV, as the signals just aren't compatible. The keyboard is a possibility, though by the time you get it sorted out I'm not sure that it would be worth the trouble. You'll first need a PC to Amiga keyboard adaptor. They're advertised in American magazines like Amiga World. Then you can simply attach an Amiga-CDTV cable adaptor from the Hard Disk Cafe. Is it worth the hassles? Probably not. However, talk to the folks at the Hard Disk Cafe for further advice.

Keyboard Queries

Dear Phil, I recently bought a CDTV plus a few CD-Rom Discs. I want to know where I can obtain a remote controlled keyboard that is supposed to have come out for the CDTV, and the price for it. I bought an external disk drive (3 1/2") at the same shop. I hope you can help me so I can set up my CDTV as a computer to run Amiga 500 programs but without a printer.

A J Suprain Maclean NSW

Ed: There are a number of keyboard options available. The neatest is the matching black infra-red keyboard designed especially for the CDTV. I don't think it's available yet, and it's likely to be expensive. The other option is to buy a specially adapted Amiga 2000 keyboard, which plugs straight into the back. It's cream-coloured, but at around \$125, you can't really complain. Check out the advertisements in this issue for more information. Once you've plugged it in, it's simply a matter of booting from your external drive with a suitable disk, and you're up and running.

CDTV Special Feature

CDTV vs CDI - The Challenge has Begun

Confused about multimedia? Worried about other systems that do the same sort of things as CDTV?
Think you should wait a while before you invest your hard earned dollars? Andy Phang has prepared this detailed report on the latest developments in the USA.
Read it carefully!

Even before the Winter Consumer Electronics Show (CES) had begun, war between Commodore's CDTV and Philip's CDI machine was being waged across selected retail chains in the USA. By the start of the new year, the street price of a CDI machine was US\$799 - comparable to that of a CDTV and not the \$1000-plus expected by both commentators and Commodore.

So what exactly is CDI, and how does it stack up to CDTV?

CDI stands for Compact-Disc Interactive, and in fact, it isn't a machine - it's a standard. Jointly developed by two heavyweights in the electronics industry, Philips and Sony (both were behind the introduction of compact discs, and look where that is today), actual CDI hardware systems will be marketed by

Philips, Sony, Samsung, and Sharp, to name just a few. At this stage, only Commodore are selling CDTV hardware systems, and that doesn't look like it will change in the foreseeable future.

This whole debate between CDI and CDTV goes much further than a bare bones comparison of two machines. The issue of 'multimedia' is a contentious one, and it will have to be covered (at least briefly) with respect to the roles both CDTV and CDI hope to play in the perceived multimedia market. I will attempt to make some sort of direct comparison between CDI and CDTV towards the end of this article, based on the information given by Commodore and Philips on their respective products, and

also based on my personal observations from the viewpoint of a 'potential CDI or CDTV customer.'

Basically, the concept of multimedia is to merge television quality pictures with sound and music rivalling that of CD products, and make it totally interactive. Of course, there will be many variations of this - does "television quality graphics" include high-definition TV, for example? And how do video and animation fit in? Multimedia still remains a "concept" even today, simply because there is no clear and concise definition of the "requirements" of a multimedia system.

High End and Low End

Many have tried, naturally, and in 1992 two streams of thinking are emerging when it comes to multimedia.

One of these is the belief in "high-end multimedia", that is, multimedia originating from the circles of current computer users. Predominant supporters of this view include Microsoft, who have set their own standards regarding a 'multimedia' machine with the MPC standard and logo. MPC (Multimedia PC) machines should have at least a 80386SX processor, multiple channel music/sound capabilities with a DAC (digital-analog converter used for speech), hard drive, CD-ROM drive, VGA graphics, and (surprise, surprise!) Microsoft's own Windows software with Multimedia Extensions 1.0.

Currently MPC-capable machines are being sold as such in the US (notably by Tandy Electronics) and many designers of PC software are using MPC as the current standard for CD-ROM based products.

At the other end of the spectrum comes the belief in "low-end multimedia", which is where you find machines like CDTV and CDI. Supporters of this movement target multimedia at those people who have a "dislike of" or are "afraid of" computers. That is why CDI and CDTV are being marketed as "hifi"-like components - the distrust of new technology and especially computer-phobia is still prevalent in our society.

As the buzzword suggests, "low-end multimedia" is more affordable than a high-end system (which can cost upwards of \$2000 whereas a plug-into-your-TV CDI or CDTV costs \$800) and the strategy from manufacturers is planned accordingly.

So we find that not only are CDI and CDTV competing with each other, they are also competing with the MPC-led variation of 'multimedia'. Anything that CDI or CDTV can do with respect to the current vision of "multimedia", MPCs can also do.

And there are more MPC-capable machines out in the "real world" right now than there are CDIs and CDTVs combined (an advantage that Amiga owners will eventually enjoy once CDTV upgrades for their machines are finally on the shelves). And of course, software for CDI will not work on CDTV or MPC, and vice versa.

Software developers are being forced to choose a platform; while some might support all three, many will only release products for two or possibly only one.

Because of the existence of only one format (MPC) in what we call "high end multimedia", attention has been focused on the lower end of the market. Either CDI or CDTV has to emerge as the dominant player in this area before they can even consider taking on MPC machines for the main prize - control of the so-called "multimedia" market. Therefore, in the context of CDTV, Commodore has to push its machine harder and faster NOW in order to beat off the CDI challenge and have a shot at MPC.

But just to make matters interesting, Apple Computers has decided to throw its hat into the ring. Instead of taking on MPC, however, Apple will contest the lower end of the market with a machine also aimed at the non-computer person, thus taking on both CDI and CDTV when its machine is scheduled for release towards the end of this year. As yet there are no details regarding whether a whole new CD format will be introduced by Apple, but CEO John Sculley made his company's intentions clear during his keynote address at the opening of CES 1992.

In yet another twist to the entire saga,

it was revealed in early February that the FCC (the US body which regulates electronics and communications) has given the green light for "interactive television" to go ahead. Wait a minute! Wasn't that supposed to be the whole idea of machines like CDI and CDTV? Well, yes, but you see - TV is fighting back. Stung by criticisms of being passive entertainment and worried by the threat of the likes of CDI/CDTV and multimedia in general, the bosses behind TV have come up with "interactive television". You, as the viewer, gets to be "involved" with the action on the screen. How?

Well, ever wanted to change camera positions or angles at the AFL match of the day? With interactive television, you can. Ever wanted to compete directly in Sale Of The Century? You can with interactive television. Want to do some direct home shopping? No problems. Want to "direct" a TV show and change the endings? It's all possible with "interactive television."

Both CDI and CDTV (and presumably Apple's CD machine when released) uses "interactivity" as a major selling point in direct comparison with television. The advent of "interactive TV" will raise a few worried lines across a number of executive brows.

The Main Event - CDTV vs CDI

Most of you will probably be familiar with the specs of a CDTV machine, and so I'll initially list out a few of the technical aspects of CDI. These are based on the Philips CDI machine (model CDI-910).

CDI-910 features a Motorola 68070 chip and one Meg of RAM standard. It can be plugged into your TV/stereo like CDTV for its audio/visual capabilities. CDI will run all software specifically designed for its system, as well as normal CDs, CD+Graphics discs, CD-ROM XA"bridge" discs, and Photo CDs (based on the Eastman Kodak storage system). CDI disks are normally the 5 inch types storing 650 Megs of data per disc.

CDI will NOT be able to change itself into a computer (unlike the CDTV) and

so options for a keyboard or floppy drives (!) will not appear. A mouse and trackball are available, while the standard means of control is a neat little ThumbStick. The Thumbstick is actually a little joystick atop a controller akin to a TV remote control, and pushing the ThumbStick will move the cursor on the screen. Various buttons on the controller will change the current modes (from TV to CDI and back), and so forth.

How does it look?

Imagine a typical CD player, with a tray for your CDs that slide in and out. No, you don't need a CD caddy like CDTV (which aesthetically and practically, gives CDI a big boostover CDTV). Buttons on the front panel of the machine will play, pause, stop, forward, or reverse the current CD, and naturally there's a digital display to keep you up at nights.

In terms of software, CDI has a few educational titles out at this stage, and one or two games. Like CDTV, Philips has signed up software companies to produce titles for CDI, including more games, utilities, and multimedia based products. And like CDTV, most of these titles are still "in the works."

At this stage, only 25 titles are actually available to the buyer. Of the titles available, several are (to be kind) unsuitable for CDI, including *Battleship* (which I found extremely boring to play) and *Connect Four*. But for every such title, CDI has something like *Escape From Cyber City* (a superb game featuring Japanimation style graphics, an excellent soundtrack, and lots more), *ABC Sports Golf* (with true TV quality graphics and speech), and even Luciano Pavarotti: O Sole Mio - Favourite Neapolitan Songs!

A major advantage of CDI is the strength of the Philips/Sony partner-ship. The success of CDs in general over the past decade has brought immediate respect to the new venture, and strong levels of support. In perhaps the best example of such respect, Nintendo has allowed its prized characters like Zelda and Super Mario to appear only on games under CDI format, which is certain to boost sales once such products are released.

CDTV New Titles

Commodore has tried hard to increase the number of software developers for CDTV (and indeed, its CDTV stand at CES was quite impressive). Upcoming titles include *Defender Of The Crown II*, *North Polar Expedition*, *CDTV Football*, and *Loom* (as well as a whole list of others).

Commodore's deal with Japanese firm Mitsui should also provide a range of new titles shortly, but plans to market CDTV heavily in Japan may be under review considering the dominance of Nintendo and Sega, and the recent release of the Sega CD-ROM system (as well as the impending release of the Nintendo CD-ROM system later this year).

It's up to the CDTV software designers to produce quality products that will employ all of CDTV's potential, because at this stage the quality of CDI software outshines any CDTV product thus far. It is perhaps fortunate for Commodore that the QUANTITY of CDI software is still limited - for now.

The threat to CDTV from CDI is manyfold. Firstly, being a standard, CDI already has some big names producing hardware that will be CDI compatible. Secondly, the marketing muscle of Philips and Sony themselves will bring fear to the hearts of many Commodore executives. Thirdly, remember that Philips and Sony are not just companies, they are corporations - with major investments and interests in other fields of entertainment.

You can expect CDI projects using material from CBS records or Columbia Pictures (both under Sony's wing) or from Hanna-Barbera (makers of those great cartoons like Scooby Doo!) and PolyGram Records.

To be absolutely honest, CDI is comparable to CDTV in every way (and even provides more) WHEN you consider that both are being targeted at a particular type of consumer, and such a consumer will probably purchase a lower-end machine instead of a MPC/higher-end machine because of the fact that he or she wants to experience Mul-

timedia without "computers". Both CDI and CDTV will provide this consumer with this need, and both are sold at the same price.

The edge will, I believe, be with CDI mainly because of the reasons given before, and because it does "look" aesthetically better than a CDTV (and I'm not being trivial here, but when you consider that every other aspect right down to the price are comparable at this stage, little things like this make a world of difference). As an aside, the US Amiga magazine Info recently ran a head to head comparison between CDI and CDTV, and the result was in favour of the Philips machine. Given the fact that software titles for both machines were (and still are) limited, I don't think we can consider producing such a result either way as yet.

CDTV had the advantage of being released into the marketplace first, but it looks like Commodore has got to do a lot more if it wants CDTV to survive. The quickest way to score up support for CDTV is to release the A690 CDTV upgrade for current Amiga owners, and to convince more software designers to support the CDTV platform. Some positive advertising couldn't hurt either; let's hope Commodore will revert from its policy of half heartedness when it comes to promoting both the Amiga and the CDTV. Otherwise, things are going to get really tough for the "Baby" of the pack.

Interestingly enough, Commodore may have gained some time to work on selling CDTV to the public because of a little thing that's running around the world right now. It's called a recession, and commentators in the US are listing it as one of the reasons why both CDI and CDTV (or the concept of "multimedia) have yet to fully "take off" in the marketplace.

It is inevitable that the public will wake up to the fact that a particular "vision" of multimedia is available to them today, but until there's a greatrush to the stores to try and buy either CDI or CDTV in droves, Commodore has the time to pressure its software developers and reinforce its own efforts towards the competitiveness of CDTV.

Phil Campbells Entertainment

All the latest news from the world of entertainment

Olympic Fever

I guess it's unavoidable. Inevitable. Yep, you guessed it, the '92 Olympic games have spawned their first computer gaming spin-off. It's International Sports Challenge, and it covers six sports in a range of 21 events. They're an unusual mix - there's swimming, show jumping, cycling, diving, marathon and shooting, and judging by the screenshots I've seen, many of the sub-games take a unique approach. Show jumping, for example, sits you right in the saddle in a first-person 3-D perspective display. Cycling uses 3-D vector graphics - the overall result, as usual, is the usual ugly but accurately animated game.

Overall, the package looks impressive, setting a high standard for what's sure to be a flood of Olympic tie-ins.

When Fifty Isn't Quite Fifty

Low-down deal of the month prize goes to a shovel-ware compilation boldly calling itself 50 Great Games from Wicked Software. Wicked indeed, because Amiga buyers will open the pack to find that they only get 30 games! C-64 buyers are better off - you'll get the fifty advertised.

There's more to be wary of - there are screen shots of four Amiga games on the box. However, read the small print - "These particular games may not be included in this pack." Let the buyer beware - it's cheap, but it's also pretty nasty. Most games are Public Domain

standard, and there's no documentation. I did, however, enjoy *China Challenge*, a not-so-slick version of Activision's *Shanghai*. It's now safely installed on my hard disk, while the rest of the collection sits idle.

On the Shelves

Questor expect to be shipping the Amiga version of *Mega Traveller II* as you read this page. There's also *Starush* and *Eurochamp'92*.

Mindscape, meanwhile, are promoting *Space Crusade* from Gremlin Graphics - like *Hero Quest*, the game has its origin in the world of board games.

Titus the Fox, from European softhouse Titus, is an arcade platform game that's reportedly similar to Alex Kid. In a similar vein comes Zool, a game featuring a Mario-type character who wanders through a lollipop maze - from Gremlin Graphics, it's due out in the next few weeks.

For fans of *Utopia, The New Worlds* data disk is also due any day. And finally, *Ultima* fans can resteasy - *Ultima* VI is due for Amiga release by mid May.

Amazing Hints Disk Update!

Have you got your copy of the ACAR Amiga Hints Disk yet? It's right up to date, and now contains hints and tips for 258 games. In fact, you can't pack it much tighter - the disk is crammed full with 1,222,653 bytes of useful information. As a bonus, it includes complete

maps for *The Bard's Tale*. The disk autoboots, and includes full text and graphics display software - we've come a long way since version 1.0!

So how do you get a copy? Simple. Send a blank Amiga Disk, a stamped, self addressed envelope for return postage, and a cheque or money order for just \$5.00 to: Phil Campbell, PO Box 23, Maclean NSW 2463.

Mindscape Sign with Audiogenic

World Class Rugby and World Class Cricket are on their way from Mindscape, who have just signed a distribution deal with UK's Audiogenic - late for the cricket season, but in time for the footie!

EPYX Rises from the Ashes

California Games II has just been released by the resurrected Epyx, and promises to be very nice indeed. Reports about the Epyx revival are sketchy, but it appears the company has been granted permission to trade its way out of the insolvency problems which plagued it in '91. And that's good news for fans of sporting sims!

Next Month ...

John Madden Football

UK magazines are raving about this one - they say it's the best ever Amiga sports-sim. Maybe they're right. We'll let you know as soon as we've checked it out - watch for our review next month, just in time for footy season.

Charge with the Light Brigade

Also next month, Greg Munro checks out Light Brigade, Directsoft's latest "what if I'd been there" war simulation. It's strategic, it's full of historical details. Read all about it in June ACAR.

And Andy's Final CES Report

The final installment of Andy Phang's American travelogue. In part three, you'll catch the remaining details of the '92 gameplan from all the US software companys. Rivetting reading - you'll find it in these pages!

Mindscape May Madness - Harlequin Competition

As usual, the generous folks at Mindscape are giving away five copies of their latest release. This month it's *Harlequin*, a beautifully produced Amiga game with a recommended retail price of \$69.95.

I've had a quick look at the gamefirst impressions were of the brilliant *Prince of Persia* style animation, and the totally inane storyline. You're playing in a crazy world, where "time" literally flies - the biggest hazards on level one are the flocks of clocks, complete with wings! It's fun, and you'll like it.

So what do you have to do? Simple. Just answer these questions:

- 1. What nationality is the Harlequin?
- 2. What does he typically wear?
- 3. How much would he say in a

typical pantomime?

4. What does he ride, and how many does he have? Beware, question 4 is tricky!

Write your answers on the back of an envelope, and mail it to:

Mindscape May Competition, c/o Phil Campbell, PO Box 23, Maclean NSW 2463 before the end of the month.

March competition winners

There's been a great response to our monthly Mindscape competition. You'll recall that the March competition was one of those-annoying word jumbles where you had to make as many words as you could out of the letters in the title of *The Final Blow*, the game that's up for grabs. Here are the talented winners...

1. Mr C Trevitt, of 16 Orleans Cresc Toongabbie NSW 2146 was top dog with an astounding 671 words. A copy of the Amiga version of *The Final Blow* is on its way

- 2. Deb Bowden, of 17 Maria St, Tanunda SA 5352, was only just behind, with an amazing 670 words. Deb wins a copy of the Commodore 64 version of the game congratulations on a great effort.
- 3. Frank De Silvo, of 60 Sewell St East Fremantle WA 6158 was dragging the chain a little with a mere 532 words.

Good enough for third prize, though, which is on the way. We hope you wanted the Amiga version Frank - you didn't specify!

4. Fourth prize goes to Craig Lugton, of 56 Meurant Ave Wagga Wagga, NSW 2650. Craig found 509 words, and wins a copy of the Amiga version.

5. Finally, Philip Collins of 41 Crump St Mortdale, 2223 scraped in with 502 words. A copy of the Amiga version is on the way to you too! Congratulations to you all, and thanks to Mindscape for the great prizes.

Entertainment Letters

Are you game enough? Game enough to say what's on your mind? If so, send your queries, gripes and compliments to the Entertainment Mailbox, PO Box 23 Maclean NSW 2463. You'll be tapping into one of the biggest and most helpful computer game forums in Australia!

Cross about Cricket

Dear Phil, Just dropping you a line to tell you my thoughts on World Series Cricket from Pactronics. After Pactronics first efforts in the cricket arena you would have thought I would have known better than to fork out my hard earned cash the second time round.

The overall quality of World Series Cricket is abysmal. From the manual to the actual game it has 'cheap' and 'rough' stamped all over it. The program itself is bugged to the hilt. Batting a good innings is virtually impossible due to the lack of feel the joystick operation has. Sometimes the batsman would do the total opposite to what you were trying to

The sound is awful. It is basically the exact same sound as used in the pitiful *Amiga Cricket* game.

The menu system deserves a mention as well. It is the worst and slowest I have ever seen.

Before you say to yourself, "this is just another whinger who can't play sports" I would like to say that I love sports games. I love TV Sports Basketball and I beat my brother-in-law first game. Basketball was brilliantly put together. The same can't be said for the cricket game. After 15 minutes of playing it I could tell it was a bug filled piece of C*!p!

Luke Scott

Ed: Phew. Are you sort of saying you didn't actually like World Series Cricket? All I can say is that I stand behind every word of my review in the March edition. As you'll recall, I was quite clear about the fact that I managed to score only three runs! I disagree that the sound is awful-I found it quite okay. And even though the manual was a bit tatty, overall I found the packaging quite impressive for an Aussie game.

Bear in mind that the program is written entirely in the AMOS programming language, which imposes some constraints - the menu system is a direct result. Why not contact Pactronics with your comments - they're always keen to improve their products.

Wishful Thinking

Dear Phil, I hope you like all the cheats that I sent you. In exchange for them do you think you could send me four copies this year of *The Australian Commodore and Amiga Review* or two and I'll try to send you some money for another two.

Oh, I would also like to ask you two questions:

1) I own Secret Of Monkey Island and I can save on it but I can't load a saved place. It keeps telling me that I don't have enough memory but I have a RAM expansion.

2) I bought a European magazine which has the complete solution to *The Secret Of Monkey Island* but can I photocopy it and send it to you?

Um ... and can you send me a cheat for *The Godfather*.

I also have an idea for the magazine - why not put a coupon on the front cover for people to send in with a blank disk for a free P.D. game.

Glenn Bananno

Ed: Nice try, Glenn. But do you think we've gone bananas or something? You'll have to do better than a few hints to score free copies of the magazine. If and when we're giving away free copies of the magazine, we'll let you know. In the meantime, I have offered a free copy of the ACAR Hints Disk to anyone who sends a stack of hints on an Amiga disk with a SSAE. That's Stamped, Self Addressed Envelope, in case you're wondering.

In the meantime, keep buying the magazine - you'll have to, to find out if anyone sends answers to your problems.

Happy Prize Winner

Dear Phil, I'm writing to say thanks for my prize in the Whirlwind Snooker competition. Congratulations to Mindscape for the brilliant game. Jimmy White's Whirlwind Snooker is everything your December article said it was and more.

Now if I could just get my 13 year old son to let me have a go. Anyway, thanks for the competition and for a great magazine.

> BJ O'Shannessy St Arnaud Vic

Supremacy and other Worries

Dear Phil, Can you please assist me with a couple of queries.

In the game *Supremacy*, at different stages of the game the mouse pointer locks up. Have you heard of any other problems regarding this game?

Is it possible to load and run Amiga Basic on a hard drive? I find that the demos will not run when running Amiga basic on the hard drive. Any clues?

Congratulations on providing a great magazine that is unique in its approach to the home user.

John Stavrinoudis Kingsgrove NSW

Ed: We haven't heard of any other Supremacy problems. Why not contact the distributor and see if there are any other reported problems.

Amiga Basic certainly can be run from your hard disk. The demo programs should certainly run - unless you've somehow got yourfile pathnames mixed up. Maybe when the demo icons look for BASIC, it's not where it's expected. In my configuration, AmigaBasic is in the "Workbench" subdirectory. Hope this helps, and glad you like the magazine.

A Wee Note of Praise

Dear Phil, Just a wee note to say thank you all at ACAR for doing a brave job. I'm off overseas soon so I will see if you are available overseas. Please ACAR persist with your 'clean' writing. As a devoted catholic Christian I have never once come upon bad language in your magazine. Thanks.

Also I appeal to all other computer users out there not to pirate software. Yes, it can be tempting but it is out and out stealing. Especially when places go broke.

Thank you ACAR.

Daniel Ross Narrabundah NSW

Ed: Boy, I'm tempted to say something really rude just for the heck of it. But I won't. Thanks for the letter Daniel -you'll be hard pressed to find copies of ACAR overseas, more's the pity. They just don't know what they're missing. Try to have fun over there anyway, and when you get back, we'll still be the cleanest @*\$%* family mag in town!

Let's Play Twenty Questions

Dear Phil, What a brilliant magazine! (Especially your section). I have a few things I would like to ask:

1. In the game *Zombi* how do I get petrol for the helicopter, what does the computer do and does the plug found in the electronics shop do anything?

2. In *Bloodwych* (Amiga) how do I escape from the serpent tower on the one player game. I think I've killed all the monsters. Do I need a spell?

3. Can anybody tell me where the entrance to the fortress is in *Dragons of the Flame*?

4. Does anyone know how to finish level two in *Heroes of the Lance*?

5. How about a disk with Demo's or Utilities on it every 4-6 months and raise the price for that issue?

6. Was War of the Lance and Legacy of the Ancients ever released on Amiga?

Although I own an Amiga 500 I think you should expand the C-64 section a bit, as they are great machines and I think the 64 columns are interesting.

P.S Piracy sux!

Kristian Adamson

Ed: Ah, it brings the tears to my eyes to read such praise laden prose. Mind you, I guess most readers don't believe you wrote all that stuff about how great the magazine is. But you and I know that you did - obviously in a crass attempt to have your letter published. It worked!

Meanwhile, most of your queries would be more at home in Adventurers' Realm or The Dungeon. But we'll put them here and see what sort of response we get from our readers.

As far as we know, neither Legacy of the Ancients nor War of the Lance have ever appeared in Amiga format, though they've been available on C64 for years. Ring Electronic Arts on (008) 074 277 for more information.

Meanwhile, cover disks are a real hassle, and my feeling is most people would prefer us to maintain the low cost, information-packed approach that we've adopted in ACAR. By the way, did you realise that when you buy a copy of ACAR, you're getting more words per issue and less wasted space than in almost any of our overseas competitors? Who needs a coverdisk?

Finally, you're right about piracy. But you need to take spelling lessons.

HINTS ETIPS

Send your Amiga hints and tips to Phil Campbell, PO Box 23 Maclean NSW 2463. If you send them on a disk with a stamped, self addressed envelope we'll send you back a free copy of the hugely successful ACAR Hints Disk, normally valued at \$5.00! What a deal!

This month's tips come mainly from Glen Bonanno, and our very own Juris Graney. Take it away, guys.

Terminator - Pause the game during play then press-F1, F2, F3, F4, F5, F6, F7, F8, F9, F10 then press fire. Now use the ESC key to skip levels.

Hudson Hawke - On the title screen type SCIENCEFICTION with no spaces or return.

Blues Brother - On the character select screen type HOULQ then type a number between 1-6 for your starting level.

Switchblade - On the title screen type LEVEL followed by typing your starting level then press fire. If you type CHROME on the title screen a sub-game should load.

Nebulus 2 - Level codes are - ICEHOUSE-5, LANDANDLOVE-9, GREENTREES-13.

On 'up' towers type HOUSEBLUES and 'down' towers type BLUEHOUSE for a little surprise.

Final Flight - Just after booting up a picture of a bloke watching T.V. should appear and at the bottom of your screen it should read "not so fussed, turn on T.V.". In the short delay after this press the HELP key.

Thunder Jaws - Any time after the game has booted up press the left mouse button for infinite lives.

James Pond - While playing type JUNKYARD then press return. You will now be invincable. Press the D key and all the locks should pop off the pipes.

Shadow Dancer - Type in GIVE ME INFINITY then press return.

Kick Off 2 - During penalties press the R key to see who is going or receive the ball

Total Recall-Type LISTEN TO THE WHALES on the high score table for unlimited lives or type JIMMY HENDRIX when you drive the taxi for infinite energy.

Days of Thunder - pause the game and type COME FLY WITH ME. This will let you fly.

Elf - type CHOROPOO for 99 pets.

Railroad Tycoon - hold down shift and Y for some money. Stop at \$32,000,000.

Chase HQ 2 - on the title screen type IN A GARDEN, now press

T for extra time and N for the next level.

Mega-Lo-Mania - Epoch codes:

Epoch 2 - BNYABDUNBHY

Epoch 3 - COVCPMJVEBL

Epoch 4 - WKCCHIEUKNI

Epoch 5 - EMOADOXXHOJ Epoch 6 - WWKDXGPXDBZ

Enach 7 VIII CTODI CUV

Epoch 7 - KUUCTOPLGHV

Epoch 8 - PEHAJBPKZAQ Epoch 9 - GYJDJHPNFHN

Epoch 10 - TJLBVSNNIGDLAST

Ninja Three - SUSS-1, IMED-2, URTI-3, BASD-4, NOUS-5,

Pegasus - Codes : SCREECH, DRAGONFLY, BEEBOP, CE-LESTIAL

Tangram - Codes: 07274-10, 14278-20, 81093-30, 47672-40, 27277-50, 02675-60, 47274-70, 91281-80.

Full Contact - While playing type QAZWXED CRFVTGBYHNUJM. Whatever you do don't press 'S'.

Stormball - Type 'LET ME WIN' while playing.

Navy Seals - Type PSBOYS on the highscore table, press ESC to skip levels.

Carrier Command-Pause the game and type THE BEST IS YET TO BE and press the '+' on the keypad. This will render your Mantas invincible.

Nightbreed - Type RISEN FROM THE DEAD for infinite lives.

Metal Masters - Press F4 during play to completely immobilise your enemy.

Indiana Jones & the Last Crusade-Here's a quick 'n' dirty guide to Indi's latest adventures. There's not much detail, so you'll have to work things out for yourself, but at least you'll know what to look for, and where to use it!

ITEM: GRAIL DIARY PLANT CLOTH STICKY TAPE JAR OF ACID SMALL KEY OLD BOOK **PAINTING** WHIP MEIN KAMPF MANUAL CATACOMB BOOK RED CORDON METAL POST METAL HOOK WINE BOTTLE WATER ROOM STEIN DRUNK ROAST BOAR BEER BARREL SERVANT UNIFORM MONEY ARMY UNIFORM FIRST AID KIT TRAVEL PASS TROPHY SILVER KEY HITLER AUTOGRAPH TICKETS COINS WRENCH

GRAIL

LOCATION: STUDY IN COLLEGE HENRY'S HOUSE HENRY'S HOUSE BEHIND BOOKCASE STUDY IN COLLEGE IN STICKY TAPE IN CHEST HENRY'S HOUSE LIBRARY IN VENICE SKELETON IN CATACOMB LOVERS AT CAFE IN CATACOMBS IN CASTLE CASTLE KITCHEN CASTLE KITCHEN CASTLE CLOSET MANY PLACES ROOM IN CASTLE CASTLE CLOSET **ROOM IN CASTLE** COLONEL'S OFFICE COLONEL'S OFFICE LOUNGE 3RD FLOOR **BFRI IN** AIRPORT AGENT HENRY RADIO ROOM TEMPI F

USF. MANY USES **GET CLOTHES** FIND CHEST GETS SMALL KEY GETS KEY FROM TAPE UNLOCKS CHEST GIVE TO COLONEL GIVE TO NAZI IN CASTLE GIVE TO ALARM OPERATOR **FLY BIPLANE** A MAP OF CATACOMBS **FIX MACHINE ENTER CATACOMBS** REMOVE PLUG **CARRY WATER** POUR ON TORCH MANY USES **GIVE TO DOG** FILL TROPHY AND STEIN DISGUISE **BUY ZEPPELIN TICKET** GET ARMY UNIFORM DISGUISE **USE IF WOUNDED** MANY USES **GIVE TO BIFF** UNLOCK DOOR GET OUT OF GERMANY BOARD ZEPPELIN PAY PIANO MAN TURN BOLT HEAL HENRY

C-64 Entertainment Update

Want to know what's new in the world of C64 games?

Damian Caynes is just the man to let you know.

Zzap! Pow! Kbang! Thwack! and many other words have been used many times back in the bad old days when Batman was turned into a pansy. Ah, but I'm sure that you don't want to hear the nostaglic reminiscences of an old writer (pushing 19). Nope.

I am actually referring to the UK magazine of the same name. The reason ZZAP!64 popped off the shelves for a few months may have had something to do with the fact that it was totally dead. Luckily, however, the pioneer of UK C64 magazines has been resurrected by Mandarin (now going under the name of Europress), publisher of such magazines as Amiga Computing and Amiga Action.

Does this sudden interest in the C64 indicate that Europress may start publishing C64 software? Maybe we'll see AMOS on the C65? Who knows ...

Immortality

Four readers sent tips this month (whoopee) although two of them have sent me tips that I've printed in past issues. C'mon people, try to send some newer tips, and stop sending the photocopied pages from other magazines (such humiliation will be rewarded with the prompt arrival of a decaying fish in your letterbox!).

Thanks go to Andrew Gormly and the mysteriously named Merlin (the first law of journalism, humour your readers) for their aging tips. Andrew also suggested that everyone send in anything on the C64 that they are able to put on paper. Surely you're not illiterate?

Okay, then review your latest game, or write a page on your area of interest and send it in to Phil to get your name in the only magazine featuring C64 information in Oz (and earn some pocket money as well)!!!

Ooh, bucket loads of thanks go out to Heath Kirby Miller for this bucket load of tips 'n' things...

Afterburner

From the creators of Starglider II ... Afterburner! Big deal, this is just one more case of hype overkill ... If you've seen this game then you'll know why Jez San's C64 Argonauts haven't done anything since ... POKE 4969,173: For infinite lives.

Thing Bounces Back

When the sequel to Thing on a Spring bounded in, it didn't make much of an impact. In fact, the only thing (no pun intended) that I can remember about it is that thing's nose was bigger! Anyways, type YJOMH on the title screen for infinite thingies.

Total Recall

Unfortunately I totally recall this dubious film licence, with its uncanny resemblance to many other Ocean games. Recently Ocean departed from its well used platform genre to make way for *Robocop III*. An interactive vector graphic extravaganza! Rumour is that it will also be appearing on C64 cart after the success of *Battle Command*.

Okay, enter your name as LIFE STILL GOES ON on the high score table. The border should now flash white. Press F1 to pause the game and the left arrow key to skip a level. When the Skip Level? message appears press F1 to play the level or the left arrow key to load the next un'.

Elite

The beginning of an era. Without this game we probably wouldn't have games such as *Epic* today! We wouldn't have those horrible bread advertisements if someone hadn't had the ingenuity to slice it ... Damn ...

When asked for the four letter codeword type SARA. Type in the proper code and during the game press *. You will now be asked for a two byte number. Type 18-FF for money, 2F-01 for en-

ergy bombs, 24-01 for an ECM system, 32-01 for a docking computer, and RETURN takes you back to the game.

Time Machine

Back to the future! I wonder where the inspiration for this cool time travelling grey haired mad scientist game came from? Hmmm, anyway to start on any level type DIZZY on the high score table and press the relevant number key (1 - Level 1 and so on).

St. Dragon

Idon't getit... Shouldn't it be Dragon St.? Or would that be too close to Tiger Road? To become an invincible avenue (or road, street, whatever) press P and then Q when you die.

Last Ninja II

This is in response to Ainsley Travers' plea for help in the December '91 issue. To get past the fan, stand against the wall and run north. Wow, that was hard.

Now for a set of pokes devised especially for Immortality by one of my pals in Victoria, Nigel Stewart. Take it away Nige!

The Simpsons

"Bart vs. the Space Mutants" Yay! My alltime fave cartoon! Not a conversion of the teeny turtle lookalike arcade machine, but a beat-em-Bart in the style of the movie *They Live*.

The pokes for each level should be entered as soon as the level has loaded.

Level	1	2	3	4	5	Value
Infinite lives	3270	3120	3119	3137	3099	173
No. of lives	38228	8938	9046	9087	9015	0-9
No. of goals	38231	8941	9049	9090	9018	1-255
Invulnerability	15025	15284	47912	51606	1695	173
Stoptimer	6353	9258	9426	9466	9335	173

Allrighty, that's all I've got for ya this month folks, but stay tuned next month for some of the latest news, reviews, and tips from the one and only (well, there seems to be a few of me) Slartibartfast! Send anything, especially loadsamoney, to Slartibartfast, 4 O'Connor Drive, Bray Park, NSW 2484.

MICHAEL SPITERI'S



Welcome to Adventurers' Realm, the place to get hints and tips, news and views, rumours and gossip and in fact, anything to do with adventure games in general! As we head towards the middle of a year that has seen some fantastic new releases such as *Maupiti Island, Suspicious Cargo*, and Sierra's *Robin Hood* (reviewed last month), adventurers all over the world are going into spasms of delight with the release of

Monkey Island 2: Le Chuck's Revenge. You'll find a quick review in this month's issue!

For letters, problems, hints and tips for adventure games, write to: Adventurers Realm, 12 Bridle Place, Pakenham Vic 3810.

For role-playing-game problems, write to Kamikaze Andy in his Dungeon: The Realm's Dungeon, PO Box 315, Maddington WA 6109.

Free Hint Sheets

New Hint Sheet

Another addition to the list of hint sheets is *Corruption*. This hint sheet was kindly produced by Stuart George of Springvale in Victoria. Add *Corruption* to the extensive list of free hint sheets

available to all Realmers.

Just list up to four hint sheets on the back of an envelope (and enclose a stamped addressed envelope) and send it to:

Free Hint Sheets, 12 Bridle Place, Pakenham Vic 3810.

The list now reads

Corruption, Pool of Radiance, Zak McKracken, Maniac Mansion, Indy, Zork 1, Zork 2, Zork 3, Bards Tale 1, Bards Tale 2, Bards Tale 3, Guild of Thieves, Jinxter, Pawn, Fish, Uninvited, Deja Vu, Hampstead, Hitchhikers Guide, Faery Tale, Borrowed Time, Never Ending Story Pt 1, Dracula Pt 2, Hobbit, and the Clever Contacts Hint Sheets.

Clever Contacts

Clever Contacts are volunteers from all over Australia who freely give solutions to problems in games they specialise in. You can obtain a complete list by writing to the Realm.

Caroline Africh of 26 Cowl Street, Greenacre, NSW 2190 can offe, help to anyone stuck in *Maniac Mansion*.

Ben Moore of 53 Douthie Road, Seville East, Vic 3139 can offer help to anyone stuck in Eye of the Beholder, Hero's Quest, Heart of China, Monkey Island, Gods, MegaLoMania, Kings Quest V, Last Ninja III.

Chris Collins of 22 Moroney St, Fraser, ACT 2615 offers hints and tips for a huge range of adventure and arcade games.

Peter Georges of 34 Arundal Park Drive, St Clair, NSW 2759 can offer help many adventure and rpg games. His list is also huge!

Travis Howell of 1 Aeulinga Avenue, Aspendale, Vic 3195 can offer help in Pool of Radiance, Curse of Azure Bonds, Secret of the Silver Blades, Champions of Krynn, Death Knights of Krynn, Buck Rogers Countdown to Doomsday, Gateway to the Savage Frontier, and Kron.

Philip Mayer of 27 Digby Court, Glen Innes, NSW 2370 can offer help in Bards Tale 1,2,3 and Zork 1,2,3.

Finally, a big, big thank you to all of the clever contacts throughout the nation for a fantastic effort!

Realm's Swap and Buy

Chris Collins would like to swap the *Beau-Jolly Big Box*, which contains 10 games and 11 disks, for some non-typing adventure games (!). See clever contacts for address.

Ben Moore is looking for *Starflight 2*. He is willing to pay top dollar for one (original only, of course). See Clever Contacts for his address.

Philip Mayer would like to buy original copies of *Ultima 1,2* and *3*. See Clever Contacts for his address.

Help & More Help or the Smart Adventurers Dept.

Heath Kirby-Miller was stuck back in January in *Kron*. Clever contact Travis Howell suggests that Heath should try to examine the rocks if he is to make any progress.

Matthew Beetson comes to the rescue of Andrew Hay who stuck a few months back in *Mean Streets*. To get the passcard out of the ape's cage in the scientist's lab, use the pole from 8911 (where you get the purple passcard).

Mrs Jacki Hoganson of Mt Isa also wrote in with help for Andrew, and she adds ... "A small warning, when searching this lab don't touch the switch on the control near where you get the pole. You will have to double back in this game quite a lot!"

Mark Healy offers the following hints to those stuck in Spirit of Excalibur (for Simon and David Parker, March issue)

- Guid at Coevent is the key - or more aptly - has the key to finding Lancelot. Simply request the gold key!

- Use the gold key at Cardiff.

- The map inside will reveal the location of another key, and Morgdons Castle (where Lancelot is being held).

Jeff Knight of Geraldton in WA and Trent Yarwood of Ocean Shores in NSW both offer Dean Taig some help in his *Ultima V* plight (March Realm). In the gray haven lighthouse

(bottom left on mainland map) is Kenneth who will teach you how to play the harpsicord (you'll need the manual). Also in the same lighthouse is David the Keeper who will give you a sextant when asked about it.

or the Troubled Adventurers Dept.

Trent Yarwood is stuck in *Ultima VI*. He writes ... "I would like to know how to get into Sutek's (formerly Blackthorn's) Castle. I know I have to cast Telekinesis on the two levers on the far sides of the pieces of the etheral void, but am unable to open the steel door that gives entry to the hall."

Matthew Beetson would like solutions (not cryptic clues) to all twelve special quests in RPG classic *Eye of the Beholder*. Any takers?

Mark Healy is one of the first Realmers to be stuck in *Monkey Island* 2. He wants to know how to win the spitting contest, and how does he beat the pirate in the dunking contest?

Mrs S Symonds is stuck in a few golden oldies. Firstly, in *Red Moon*, how do you get past the dragons, then in *Aztec Tomb* - any help will do. In *Ring of Power*, can anyone help with the password, then in *Erik the Viking*, how do you get past the invisible wall? Finally, Mrs Symonds would really like to know if anyone has or knows of *Rick Dangerous* 2.



Recently we let Andy Phang out of his dungeon for a while to check out the huge Consumer Electronics Show in the USA.

Here's part 2 of his whistlestop tour.

ontinuing with the CES report, our next stop is at Accolade. Sporting one of the bigger stands at the show, Accolade execs stated that Les Manley II: Lost In LA would indeed make it onto the Amiga "in the near future". Previously discussed in The Dungeon, this sequel to the graphic adventure Search For The King lets you reprise your role as Les Manley and places you on a quest to investigate the mysterious kidnappings of famous Hollywood stars. The latest victim happens to be your old pal (and the world's smallest man), Helmut Bean.

Yes, this time it's personal. Expect some stunning digitized footage, an easy to use point and click interface, and a variety of silly but funny puzzles. Accolade also had *Elvira II* on display (in fact, it's out now).

Action Pack

Turrican, Turrican II, Kick Off and X-Out

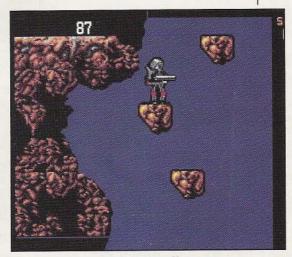
It's compilation time again, and Juris Graney checks out the latest in discount dynamite.

s I study the surrounding landscape, Inotice a ledge protruding from a cliff face. I run and jump and make the ledge. As I turn I'm confronted by an awesome sight - thousands of metallic creatures forming in front of my eyes. Their lifeless eyes scan the valley for any human activity, for any sign of infrared energy. They've seen methe first starts moving in my direction. As it jumps into the air, metallic legs spring out to form wings.

I pull my laser from my side and fire. My shot hits the creature, which explodes into mil-

lions of tiny pieces. Others soon take its place and start on their descent. I keep firing until all of them are destroyed. I move swiftly, I jump across from the ledge onto a levitating platform, and head for the hills. Where can I go that I'll be safe from these evil creatures? And for how long?

Yep, I'm playing *Turrican I*. This is truly a remarkable game. The graphics are picture perfect, the scrolling is smooth and clean and the sound is terrific.



Turrican II

In *Turrican* you have to guide the hero of this game through five different worlds, in which you will be confronted by various perils. Three of these worlds extend over three levels, the remaining two worlds over two levels. Ever changing enemies will constantly try to destroy you. You have to use your weapons skillfully in order to survive the varied levels. To aid you in your battle for freedom, you can gather up furthur weapons and other extras on your way.

Verdict: If there was ever a platform shoot 'em up king, this is it. *Turrican*'s truly brilliant.

Now onto Turrican's sequel. You guessed it, Turrican II. The story is the same as in the first. The thing that's different is that in the

middle of the game you have to enter a space ship and fight through three levels with the hyper fast moving ship. Examine every level carefully - you'll find new surprises and useful items everywhere.

The graphics are polished until they sparkle.

Verdict: A magnificent sequel. Stop spending money in the pinny parlours,

buy *Turrican II* and it is like having your own coin-op in your room.

As a famous Monty Python character once said, "Now for something completely different."

Kick Off. That's right, in amongst all these shoot em'ups comes a soccer game. Kick Off is an accurate soccer sim with a full size multi-directional scroll pitch and the markings, goals etc in correct proportions. It is very realistic and makes soccer bearable. The fact is, this is one of the most popular computer games of all time - play for a few minutes and you can see why.

Verdict: *Kick Off* is another great sim. It's one of the best soccer sims - great graphics and sound make it top stuff.

Now to the last of the four games in the Action Pack ... *X-Out*.

This is a very old game and also a very addictive game. The main idea of this game is to save the world - I think. The graphics and sound of *X-Out* are excellent. It is very addictive and another classic golden oldie.

Overall: Action Pack is one of the best compilations around. Games like *Turrican* and *Turrican II* are brilliant, the soccer sim is a great one and *X-Out* is a great wet weather game. In conclusion if you miss this one, you're crazy.

Distributed by Mindscape (02) 899 2277. Available for Amiga & C64. RRP \$59.95 and \$49.95.



Ratings:	
Graphics	95%
Sound:	90%
Addictiveness:	93%
Overall:	96%

Sliders

Ken Simpson has got problems. Here's a game he likes - but he just can't win. Read on to find out why.

his is one of the most difficult game reviews I have had to write for some time. Not because I am going to blast it, nor because I can't tear myself away from it - but rather, I'm not quite sure what to say.

Way back in the dark ages when the only form of sentient life was the Amiga 1000, the king of games was *Marble Madness*. It was a great arcade conversion by Electronic Arts of a classic game. You had to move a small ball through a very imaginative (and deadly) maze. It was a great idea and I spent many an hour desperately trying to get through the "Silly Maze". Now a company called Microids have taken that idea, enhanced it and released *Sliders*.

Basically you have a playing field made of grid squares which are contoured and "textured" - you'll see what Imean later. Your aim is to shoot a small golden ball across your opponent's goal line by passing the ball and rolling after it. When you touch the ball (also called the cyberpuck) it sticks to you. You can then aim and shoot in any direction you want.

Sound easy? That part is, but when you have the puck you no longer have movement control over your ball. Now that makes it tricky. If your opponent bumps you then in all likelihood you'll drop the ball and you'll have to get it back to have a shot.

That's basically the idea, and you have a time limit. Whoever has the most points at the end of the time, wins. I bet you guessed that part. It has many of the compulsory features that games need to have. Three levels of play - easy, medium and hard - as well as 12 game styles. There's even an option to play a human opponent on a split screen on

your computer (I haven't tried this yet).

You can choose mouse control, joystick or keyboard. So far, I have done much better using the mouse than the other two. It just flows more smoothly from the mouse. There are many other variable options which affect the game play such as shot strength, gravity, speed and the like - it's a very fully optioned game in this regard.

Let me tell you my problem. I have spent some hours now trying to master this game. Well, master isn't quite the word - even to have a chance at it would be nice. But after more than twenty games I still haven't even scored one goal. Maybe my reflexes aren't quite good enough, or maybe my SA (situational awareness) is poor - but I just can't get it together. It's a pity because I see so many things that tell me that this is a good game. The graphics in it are just beautiful. The textured balls are lovely and the play fields are nice.

The creme de la creme is the scrolling. The smooth scrolling is a delight.

No jerking about the screen, just beautifully smooth movement that makes it a delight to watch. The sound effects are tastefully underdone. They complement and add to the overall effect in a way that's very impressive. Whoever put the package together in this way has real art.

The negatives are few. The manual is a single sheet that is really quite poor and multi-platform (yes even IBM!) It took me ages to work out from playing that the textured part of the playing field were arrows that meant I could only roll one way along them. No wonder I kept getting scores of 35 to nil! Once I had worked that out, 15 to 20 to nil were more normal. But all that aside, the gameplay just didn't click with me. I think it has great potential and I'll certainly keep going at it a while longer. I am just feeling quite frustrated now.

Nevertheless I want to emphasis that this game has real class in lots of ways. It is almost worth getting just as an example of putting an arcade game together, graphics and sound and options etc. *Sliders* may be just your piece of CyberPunk!

Distributed by Mindscape (02) 899 2277. RRP \$69.95.

Ratings:
Graphics 95%
Sound 92%
Gameplay 65%
Addictiveness 80%
Overall 85%
Comment Take the challenge!



Videokid

Nasty things can happen if you watch too many videos. And I don't just mean you'll get square eyes! Check out Juris Graney's experience with Videokid and you'll see exactly what I mean.

illy was just an ordinary everyday kid who loved to watch television. One day, his dad brought home a brand new video recorder and some video cassettes. Billy settled down to watch one, but instead of the sound of the video tape starting, he heard a crazed, evil laugh. He approached the screen slowly, listening carefully. Suddenly, the screen exploded into a million tiny particles - but instead of being thrown back by the blast, Billy found himself

He felt himself being sucked down endless tubes, tiny particles of light searing through his body. Then, as suddenly as it started, it stopped, and the acrid smoke began to clear. Looking down, Billy realised that he was dressed as a Magician.

Egad! What a story! The crazed voice continued. "Billy, you are now trapped. You must find your way through the mazes and worlds I have created for you. There are five worlds to battle through, each with evil monsters and hazards to impede you. Should you succeed, you will be free to return to your normal life. But if you fail ...'

Well, you're right. It doesn't sound very probable. But who says it has to be? Just sit back and enjoy!

You play the role of Billy, the Videokid. Just like the crazed voice said, there are five worlds, but what he didn't mention was the fact that these five worlds are separated into four sections. Each of these worlds are guarded by fierce enemies, all out to stop your progress. At the end of each world, as usual there is an end of level dude, which is three times bigger then you and three times more deadly than the rest of the

Each world follows a unique movie theme - Medieval, Western, Sci-Fi, Gangster and Horror. They're all filled with bright and cute looking sprites, and the musical score really sets the mood for the level.

The graphics are brilliant. They are colourful and well animated. If you have an auto-fire joystick then get it ready. You don't necessarily need it, but it does help. The screen scrolls without flicker-

The music is excellent and the fx's are stunning. The voice which says "Well Done" and "No Sweat" is very nice and adds a touch of humour to the game. The main sprite (Billy) flickers sometimes when the autofire is flicked on, but nothing that is too annoying.

Verdict: Videokid is a must for platform freaks. It is very addictive and will have you begging for more. The one thing that I found wrong with the game was the fact that the screen was always moving, and if you were caught in a hole or a part of the screen with no exit and the screen passed over you, you would lose a life. Otherwise Videokid is a brilliant game and deserves high praise.

Distributed by Mindscape (02) 899 2277. RRP Amiga \$69.95.

Ratings:

93% Graphics: 90% Sound: 91% Addictiveness: 93% Lastability: Overall:

Games Update

Welcome to another update column from the guys from Interlink Software.

There were a couple of games that the critics went absolutely loopy about but still didn't do very well in the charts. They were Turrican I and Turrican II. Well Turrican III is on it's way and if it improves over II by the same amount II did over then it will be an arcade third Amiga! machine instalment Another rumouring it's way around the games world is Kick Off 3. I don't know how they're going improve on 2 and it's plethora of data disks but if they do, what a monster game it will be.

Speaking of continuations in the series, how about these, all due this month - Megatraveller Manager Player Shanghai II, Buck Rogers II, Eye Of The Beholder II, Secret Of Monkey Island II and Team Yankee II.

By now you should be playing Graham Gooch's Cricket and Epic. If not, all I can say is - "they're due in two weeks".

Dare I mention Sim Earth, nah, better not.

For all of you who liked Ports Of Call, the sequel called Transatlantic is due now. Also Jimmy White's Snooker

Two sports games that look great on a VGA IBM, The great on a VGA Challenge and Links Golf, are due shortly on your Amiga. Some more great games that IBMers have enjoyed for months are "real soon now" also dué Megafortress. Secret Weapons Of The Luftwaffe, 2000, Wing Commander, Civilisation and dare I mention it) Sim Earth (nah, better not).

With products and information, Interlink is up to date. Give them a call.

The Game Gurus.

Wizardry Six Bane of the Cosmic Forge

Veteran RPG player Mark Harris checks out a game of cosmic proportions.

ritten by the eccentric David Bradley (as were the previous five games in the series) Bane of the Cosmic Forge represents the new generation of Wizardry. The monsters and dungeons have been graphically upgraded and they are well rounded which gives a good 3D effect. Though this is a typical pre-VGA I.B.M. conversion - one of a few minor disappointments in an otherwise excellent game.

The story unfolds intriguingly as you delve into a mysterious castle and its environs in search of the Cosmic Forge, a magical pen whose every word comes true. For past and new players of the Wizardry series the icon-enhanced magic and combat systems are true to the Wizardry tradition and are easily mastered after a careful read of the generous manual provided. Being a veteran role-player the puzzles faced are of a devious design and they delight me, but don't be put off if you are not in the veteran class. By using a combination of animal cunning and nous you will prevail (if you get stuck I am available for help through Clever Contacts).

The puzzles reflect the eccentricity of David Bradley - he finds a use for a stuffed beagle and mystery oil to name just two.

The other minor disappointment I found are the meagre hit points you

receive when generating your intrepid band of characters. A word of advice spend some time when you create your characters and experiment a lot. I found that a good party consists of a Ninja, a Monk, a Samurai, a Bishop, a Bard, and a Psionic or Alchemist. The Bard is a requirement because only they can play the many instruments scattered throughout the game, and they can double as thieves or Mages after a few advancements.

The only skill you'll need to add points to manually are magical abilities,

Ninjutsu, Kirijustu and Scouting - all others advance automatically during combat.

A word to the wise ... save your game often because during the initial sequences you will easily be killed. It's best to change the configuration to Easy.

The digitised sound track is okay, but tends to become grating after playing for a few hours. You can also change this in the Configuration Menu.

The scope of this game is enormous - it has 24 levels to be explored and conquered with each level becoming harder as you progress. Take time to speak to Queequeg (Giant Mountain) and L'Montes (Beloved) as they sell useful items.

As advancements are slow there are two hot spots in the game - the first is the Belfry. The second I'll leave you to find.

I found Bane to be a very compelling and addictive experience and it would be ideal for veteran and new gamers alike. Stay tuned for the next scenario.

Distributed by DirectSoft (02) 489-7853. RRP \$79.95.

RATINGS	
Graphics	65%
Sound	65%
Gameplay	85%
Value	85%
Overall	75%



Non role player Phil Campbell decides to bite the bullet and learn the art of playing RPGs. And what better way to start than with a game with real class ...

Black Crypt

ew Year's Resolution Number 197. I faithfully promise to do my best to enjoy at least one Role Playing Game in 1992. Cross my heart and hope to die - I'll try as hard as I can. After all, everyone else seems to be playing them. What's the secret?

At the moment, *Black Crypt* is certainly the pick of the bunch. It's an Amiga game with a swag of top quality features. Graphics are displayed in 64 colour "extra half-brite" mode - a rarely used programming trick. Sound effects are digitised, and the musical score is first rate. Not only that, there's a handy auto-mapping feature, just right for raw recruits.

On the down side though, there are "20 twisted levels of mutinous monsters and treacherous traps." And the monsters are actually "intelligent" - they'll charge or ambush when you least expect it.

As always in Role Playing Games, there's a "quest". In this case, the task is to lead a team of adventurers into the dreaded Black Crypt. We're searching for the magical relics that were once used to send the evil Estoroth into exile. He was meant to be banished in a dimensional warp for ever, but - like Derryn Hinch - he's back, and he's spoiling for a fight.

Step one, then, is to create my team. As per role playing tradition, there are four characters. I call mine Fred the Fighter, Eric the Cleric, David the Druid and Wanda the Magician - not very classy, Iknow, but you should have seen how long it took us to think up names for our kids. More important than the names, though, are the characters' skill levels.

Points are allocated to each member for strength, intelligence, wisdom, and dexterity, and it's simply a matter of juggling the figures 'til you've got a well balanced team.

Finally, we're ready. We step into the tomb, clicking on a set of directional arrows on the screen. Icons underneath the arrows show the faces of each character, together with the items they're carrying. A detailed view of our location in the crypt fills the upper part of the screen. As we move, the view is updated instantly, giving a genuine illusion of motion - it's all done one step at a time with the arrows, following the twists and turns of the maze like tomb. And in moments, we're helplessly lost.

We pause to examine a plaque on the wall - "The Heroes Tombs lie Deep Below, Your Way is thick with Lock and Foe." Mmmm. Interesting. I wish I

knew what it meant.

Moments later, I do. The way ahead is barred by a huge, locked door. My party turns, only to be confronted by a huge, two headed monster - he's brown, he's mean, he's got big teeth, and try as we might, there's no way out. I flail furiously on Fred's face with my mouse button to make him lash out with his sword - all to no avail. I click vigorously on Wanda's iconised image to make her cast spells - no better. And in moments, all the members of my party lie dead on the floor. "Sadly," says the message on the screen, "your party has failed to stop the return of Estoroth." As if I didn't know.

So what can I say? I'll keep trying. I have to, because I haven't really enjoyed it yet. But my growing suspicion is that games like this are a bit like Cryptic Crosswords - great fun if you know how, but absolutely frustrating for the uninitiated. But even I can see that *Black Crypt* is a superb example of it's genre - if you're a Role Playing fan, make sure you take a look.

Distributed by Electronic Arts (075) 911 388. RRP Amiga \$59.95.

85%

Ratings:
Graphics: 87%
Sound: 82%
Gameplay: 84%

Overall:



Andy Phang is hot under the collar. In fact, he's savage! Find out why as he checks out ...

Gateway to the Savage Frontier

hen it comes to SSI's Advanced Dungeons and Dragons role playing system, computer gamers either love or hate the final product. There are no in-betweens. Fans of the "Gold Box" games, as they have become known (because of the distinctive packaging) enjoy the strategic aspects of AD&D combat, the ability to explore a realm made legendary by the original dice-based game, and the opportunity to transfer party members from scenario to scenario with each new release.

Personally, I would say that I enjoyed various aspects of SSI's AD&D efforts, and the Amiga versions of previous games in the series like Secret Of The Silver Blades were worth the purchase price. However, I'm afraid that I will have to draw the line at SSI's newest AD&D game, Gateway To The Savage Frontier (which, incidentally, is the first of a new series of AD&D RPGs).

It's not because I've grown tired of the system (although the same basic interface has been retained yet again, after all these years). It is because the Amiga port of *Gateway To The Savage* Frontier is possibly one of the worst in Amiga gaming history.

The music that plays during the credits does no justice to the Amiga sound chip and the title screen gives ominous warning of the perils that lie ahead. And by that I don't mean the endless armies of trolls and kobolds that are packed into each AD&D game!

To say that the graphics in *Savage Frontier* are disappointing is a major understatement.

Okay, it's more of the same. To be fair, anyone who buys Savage Frontier would probably expect that. But it's more of the same implemented in a shoddy and lacklustre way. Movement through cities and dungeons is painfully slow, and combat is even more unbearable than before. Selecting an option during battle constantly redraws the screen, which is annoying at best and unforgivable at worst.

What I cannot understand is how SSI managed to produce such a poor Amiga conversion (and dare release it to the public!) when nearly a year ago, the company finally got it right with Silver Blades. It would definitely appear that Savage Frontier was rushed for release, possibly because its sequel (Treasures Of The Savage Frontier) is planned for Amiga shelves later this year.

As a result, the graphics have suffered, the interface has suffered (being extremely slow and unwieldy), and any semblance of gameplay has been completely lost.

As if to underline the way in which SSI has manhandled its Amiga conversion, the following quote is highlighted in the Reference Card included in the game: "You must save the game at least once every hour, or the game may fail. If failure occurs, you may restart the game from your last save." Now I don't know about you, but I'm certainly wary of a game threatening to crash on me every hour if I fail to save it. Something like this is totally unacceptable.

The Reference Card also has a section on installing Savage Frontier onto a hard disk, and mentions that the game requires about 2 Megs of hard disk space (it comes on three floppies). However, a green slip (added in the box at the last minute) produces this gem: "Due to the size and scope of Gateway To The Savage Frontier, the game cannot be played on a hard drive. You may ONLY play Gateway To The Savage Frontier from diskettes." It's not that I'm worried about playing from floppies. It's not that I'm too concerned about the conflict of information from this green slip and the Reference Card. What I can't understand is, how can "the size and scope of Gateway To The Savage Frontier" prevent hard disk installation? Perhaps SSI doesn't know that most hard drives sold these days have more than 2 Megabytes of storage space. If Gateway can't be played from hard disk, fine, but don't give Amiga owners this sort of excuse.

I sincerely hope that SSI's next Gold Box game (*Pools Of Darkness*, which has shipped as I type) will be a major improvement on *Savage Frontier*. In fact, it should be a major improvement on *Silver Blades*, SSI's best AD&D RPG conversion to date.

As more and more high quality role playing games appear on the Amiga market, SSI has to start putting some real effort into its products. Another badly

programmed release like *Savage Frontier* could destroy the credibility of SSI's Gold Box games for good.

Distributed by Electronic Arts (075) 911 388. RRP Amiga \$69.95.



Ratings:

Graphics: 25% Sound/Music: 30% Gameplay: 40% Overall: 35%

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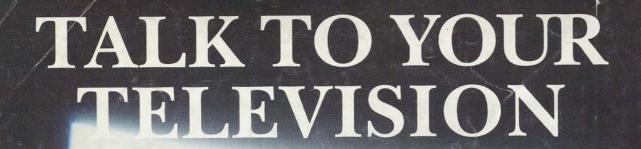
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